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ABSTRACT

About 45 persons, who are affiliated with government agencies, universities, and foundations and whose fields of specialization included economics, sociology, housing, welfare, medicine, education, and nutrition, participated in a workshop on the quality of rural living. Formal papers presented during the initial sessions included: "What Constitutes Quality of Living?" "Rural Health in the United States," "Nutritional Levels in Rural United States: New Approaches Needed," "Urban-Rural Contrasts in Public Welfare," "Possibilities for Improving Rural Living: An Economist's View," "Quality of Rural Education in the United States," "Rural Housing in the United States: Essential Steps Required to Upgrade It," and "Employment and Income of Rural People." All but one presentation was followed by a discussion period. The recommendations of three work groups on needed research, changes in education, and changes in government programs and policies are included. The Agricultural Board appointed a committee to prepare recommendations based on the major points brought out in the papers, in the discussion periods, and in the reports of the work groups at the conclusion of the workshop. Educational opportunities for the young, adult education, welfare, housing, social monitoring, the team approach to research, and distribution of economic activity and population growth were the areas of concern. (HBC)

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Proceedings of a Workshop

AGRICULTURAL BOARD
DIVISION OF BIOLOGY AND AGRICULTURE
NATIONAL RESEARCH COUNCIL

NATIONAL ACADEMY OF SCIENCES Washington, D.C. 1971

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Preface

This volume contains the proceedings of the Workshop on Quality of Rural Living, which was held in Washington, D.C., May 5–7, 1969, under the sponsorship of the Agricultural Board, Division of Biology and Agriculture, National Research Council.

About 45 persons participated in the workshop. These persons are affiliated with government agencies, universities, and foundations. Their fields of specialization include economics, sociology, housing, welfare, medicine, education, and nutrition.

Formal papers were presented during the initial sessions. Except for the paper presented at a dinner meeting, each presentation was followed by a discussion period.

On the third day, three work groups formulated statements on needed research, needed changes in education, and needed changes in government programs and policies.

After the workshop had been held, the Agricultural Board appointed a committee to prepare recommendations based on the major points brought out in the papers, in the discussion periods, and in the reports of the work groups. Most of these recommendations can be implemented by appropriate groups in the federal government and in state governments; a few would have to be implemented by groups outside of government.

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I PAPERS AND DISCUSSIONS

ARCHIBALD O. HALLER

What Constitutes Quality of Living?

Our assumptions about the good life undergird many of our decisions and actions. These assumptions are deep, and I doubt that a sociologist's remarks about them can have much effect on them. Still, a sociologist can point out some of the things that Americans, regardless of subculture or stratum, deem necessary to a meaningful existence today; he can call attention to factors that help determine the quality of living and say something about the distribution of these factors; and he can predict some of the responses that people will make to changes.

Almost everyone desires freedom, equality, economic justice, and social justice. These high abstractions can be equated with certain down-to-earth realities:

- Parents want their children to survive and grow up to be healthy. That is, they want access to adequate medical services; they want pure air and water, sewage- and garbage-disposal systems, nutritious food, and recreational facilities.
- People want education. They want the knowledge and understanding that will enable them to relate to their surroundings and to take actions that will be beneficial to them and to their children. Thus, they want access to educational facilities.
- People want the opportunity to influence group decisions affecting their lives. To have this opportunity, they must participate in politics.
- Most people want work that will enable them to support themselves and to contribute to the well-being of others.
- Most people want a social system that will equitably distribute

the task of providing goods and services and the remuneration for doing the work, while allowing special rewards for those who make especially valuable contributions.

What do these statements tell us about the quality of rural living? On the average, access to adequate medical facilities is low in rural areas (Roemer, 1968). Infant mortality is high (Loesser and Hunt, 1968). Education is available but the quality is low (Haller, 1968). Family and personal income is low (Hathaway et al., 1968). Income and resources of the aged are particularly restricted (Kreps, 1968).

Until recently, agricultural leaders have glossed over the great differences in the quality of rural living. Various political forces and economic policies have caused state and federal agricultural agencies and the agricultural colleges to concentrate their attention on a small part of the rural population. This is illustrated by data on the concentration of price support benefits, most of which go to a small number of farmers (Bonnen, 1968).

We have a stereotyped view of rural life, thinking of the rural family as a white family that owns and operates a productive farm. No member of the family works elsewhere. The children do well in school and are successful in later life. This is the stereotype. Those who fit it are the ones who get most of our attention, but probably less than half of the farm families, and about a tenth of the rural families (farm and other), come close to the ideal that we envision. The stereotype is too attractive to include even the middle-class rural nonfarm population. Also excluded are Mexican migrant farm workers, rural Mexicans in the West, rural Negroes in the South, and rural Indians and Puerto Ricans.

Coleman et al. (1966) show that rural Negroes (in the South and Southwest), Mexicans, Indians, and Puerto Ricans lag far behind in educational achievement test scores. Price (1966) comments on the low educational attainments of Negroes in the South, on their low incomes, and on the high ratios between (1) working-age adults and (2) dependent children and the aged. (See also Kain and Persky, 1968.)

The rural ethnic groups are especially deprived. Many of them are the descendants of people who were brought into American society by slavery or conquest. We should not be surprised by the fact that some of these people are ambivalent about their membership in American society.

We know, then, that the stereotype is false. On the average, the quality of rural living is low, and there are substantial contrasts among different rural sectors. We no longer ignore these contrasts. As the nature of the problem becomes clearer, many people are trying to do something about it.

There is reason to expect that we will develop policies and practices through which effective political participation can be assured, that we will get rid of inequities in our legal procedures, and that we will provide greatly increased access to the most needed goods and services. I am confident that we will wipe out the poverty, misery, and isolation that we find among various neglected rural ethnic groups and among their equally unfortunate relatives who have recently moved to the cities.

These changes are not going to be easy to make. The people whose status is raised will have to learn how to live with their new benefits. This will take time, and therefore may be more costly than if the same things were provided for a group who already knew how to use them. Since Durkheim, sociologists have been aware of the confusion people go through when they suddenly make new gains. We should not be surprised if occasional acts of violence result from needed and well-intended changes. And if we can judge by the experience of the European immigrants as they moved into the new culture, the real shock waves may occur when the second generation grows up. During that period, the old ethnic norms worked well enough for the first generation, but their children often experienced a demoralizing cultural conflict.

Let us not forget that the existence of ethnic subcultures implies the presence of a dominant subculture. If an ethnic group changes, the dominant group must also change. This too will take time and could generate violence.

But considerations of this sort should not dissuade us. They should merely serve to open our eyes to some of the sociological complexities that may have to be faced in our attempts to improve the lot of America's rural people.

As you can see, I think the main problem of rural society is the same as the main problem of urban society. It is concerned with variations in the quality of living. It is concerned with unequal access to the experiences that constitute the good life, and with the rights, goods, and services that are prerequisite to those experiences.

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DISCUSSION BY PARTICIPANTS

The discussion brought out the following supplementary points:

1. When we speak of "rural people," we do not limit ourselves to people engaged in agriculture. We include all people living outside of cities. Many rural people for whom living is of low quality do not receive the same attention that is received by similarly disadvantaged people in cities.

2. The movement of some ethnic groups from rural areas to cities has been rapid in recent years. Among these are Mexicans, Puerto Ricans, and Negroes.

3. Increases in migration of low-income families to cities have been greater than increases in employment opportunities in the cities. Some rural families, therefore, have contributed to the problem of the urban ghetto; to that extent, the low-income problem in rural areas has been transferred to cities.

4. Some data indicate that second and third generations of the migrants from rural areas to cities are more dissatisfied with their limited social and economic opportunities than the first generation was.

5. As the disadvantaged in rural areas come to feel that their low economic status is unjust, they may become more aggressive in expressing their grievances.

EDWARD W. HASSINGER and ROBERT J. McNAMARA

Rural Health in the United States

RURAL SOCIETY AND THE GENERAL SOCIETY

We begin with an observation that will probably be made by other speakers at this meeting: Rural society in the United States is an integral part of the general society. From that point of agreement, there is likely to be divergence as to the characteristics of the components of rural society and the relationships among them.

We think of American society as a mass-industrial society in which technology and the use of energy are highly developed, and we think of it as based on large-scale vertical structures that extend from the local to the societal (national) level and tend to be integrated there (Martindale, 1960, p. 254). Although we are not suggesting that it is a monolithic national social organization, we do recognize that decisions having substantial, direct consequences for communities are often made outside those communities.

At the same time, we would say that the rural sector is not effectively integrated at the rural level, and for this reason it is not a society in the technical sense. Certain organizational units in the general institutional areas (for example, health, education, and religion) have not been sustained at the rural level. Moreover, rural organizational efforts are likely to be concerned with adjustment to situations in the larger society rather than with concerns of rural society as a separate entity. However, we will use the term "rural society" to avoid awkward phrasing.

In an industrial society the health of a population is crucially important. There must be a work force that can be counted on to report for work punctually and regularly and to give alert attention to their

jobs. Absenteeism disrupts the assembly line at the factory, the standard procedures at the office, and the work routine in the hospital ward. For the individual, reasonably good health is necessary for participation in an achievement-oriented society. Along with education, health is often regarded as a right of the individual and a responsibility of society (Parsons, 1960, p. 311).

One way to deal with the problem of rural health is to compare the rural situation with a suitable standard. The tendency is to look for such a standard in the general society. The modern study of rural problems was ushered in by the report of the Commission on Country Life, appointed by President Theodore Roosevelt (Commission on Country Life, 1911). The Commission's general aim was to bring rural society up to the level of the general society. Its deliberations have been called "the first comprehensive attempt to learn the status of farming, the traditional occupation of the United States of America, under the impact of industrialization" (Ellsworth, 1960, p. 155–156).

Galpin (1923, p. 64) saw the problems of rural society as evidence of the parochialism of rural people and advocated an expanded view of the world. Taylor (1953) interpreted the farmers' movements as attempts to get in step with commercial aspects of our economy. Soth (1960) diagnosed the agricultural problem of the 1960's in the context of the general society. Morrison and Steeves (1967) used relative deprivation of the agricultural economy when compared with the industrial economy as an explanatory concept. They pointed out that in the National Farmers Organization episode of the farmers' movement the members of the organization in Michigan were more likely to have nonagricultural interests and to be more affluent than farmers in general. The President's National Advisory Commission on Rural Poverty (1967) used the general society as the point of reference in its discussion of rural poverty. Vidich and Bensman (1958) dealt with the relations between a local community and mass society. Taylor and Jones (1964) dealt comprehensively with rural society in urbanized situations.

Our approach is to deal with health services in rural areas within the context of the medical-care system of the general society. Two structural elements of society are treated. One is the cultural element: goals, aspirations, beliefs. The second is the organizational element: institutional means (Merton, 1957, p. 132–136). Our tasks, then, are to examine the correspondence between health conditions and health services in the rural sector and other sectors and then to assess the congruence of the structural elements pertaining to health.

THE STATE OF RURAL HEALTH

Here we shall try to provide fairly explicit information on the state of rural health, relying chiefly on selected findings from the National Health Survey and on other materials issued by the National Center for Health Statistics, Public Health Service, U.S. Department of Health, Education, and Welfare.

Migration makes it difficult to make clear-cut rural-urban comparisons, and this limitation should be kept in mind. Also, apparent deficiencies in professional health personnel and facilities in rural areas may be offset to some extent by rural access to personnel and facilities in urban places. Use of physicians and hospitals in specific situations (e.g., childbirth) may tell more about health conditions than counts of personnel and facilities. Moreover, data on disability and limitation of activity are useful indicators because, to some extent, they reflect occupational and environmental risks associated with different residential settings.

Visits to Health Professionals

The continuing decline in the number of general practitioners is more critical in rural areas than in urban areas because rural people rely on these practitioners more, and on specialists less, than urban people do. Also the rural areas have fewer physicians per capita. The per capita availability of physicians in isolated counties has changed little, whereas the per capita availability of full-time specialists in or near metropolitan areas has increased considerably (Public Health Service, 1964).

For the year ending June 30, 1967, the rate of visits to physicians was highest in metropolitan areas and lowest among farm residents. The range was from 4.7 visits per year to 3.3 (National Center for Health Statistics, 1968, Table A, p. 3).

When the data are examined for use of selected medical specialists and practitioners, they are found to differ greatly on a residential basis (National Center for Health Statistics, 1966). For example, pediatricians see about 25 percent of the children living in metropolitan areas, about 12 percent of those living in rural nonfarm areas, and 4 percent of those living on farms (p. 5). Similarly, obstetricians see about 10 percent of the women living in metropolitan areas, fewer than 6 percent of those living in rural nonfarm areas, and fewer than 3 percent of those living on farms (p. 10).

In contrast, chiropractors see 4.3 percent of the people living on farms and only 1.9 percent of those living in metropolitan areas.

Frequency of visits to chiropractors is about the same for the two groups (p. 38).

The city group and the two rural groups visited optometrists in about the same proportions (p. 43).

Frequency of visits to dentists is highest in large cities and lowest in the open country (National Center for Health Statistics, 1967, p. 14). The range is from two visits a year to less frequently than one visit a year.

Use of Hospitals

Surprisingly, the percentage of rural people who use hospitals is about the same as the percentage of city people who use them (National Center for Health Statistics, 1967, p. 12–13).

Hospital Insurance Coverage

The percentage of families with complete hospital insurance coverage is higher in urban areas than in rural areas. The higher percentage in the cities may be due in part to the availability of group contracts and to higher incomes and education levels (National Center for Health Statistics, 1967).

Physical Disability

Data collected in the Health Interview Survey for the 2-year period ending June 30, 1963, showed that 7.3 percent of the labor force had chronic limitations affecting ability to work. The percentage was lowest (3.7) among professional, technical, and related workers and highest (19.0) among farmers and farm managers (National Center for Health Statistics, 1965, p. 32–33).

Infant Mortality

The infant mortality rate is commonly used to indicate general health conditions. In 1933, the first year in which registration of births was required in all the states, the infant mortality rate for the United States was 58.1 (that is, there were 58.1 deaths during the first year of life for each 1,000 live births). By 1940, the rate had been reduced to 47, and by 1950 to 29 (Bureau of the Census, 1943, p. 572). For the 2-year period 1960–61, the average annual rate was 25.7.

During the first half of the century, the infant mortality rate in rural areas was considerably higher than in urban areas. In 1940,

for example, the rural rate was about 50, whereas in cities of 100,000 population or more, the rate was 39 (National Center for Health Statistics, 1965). Today, race, education, and income are the factors that produce differences in infant mortality rates; the residence factor is insignificant.

In 1961, 97 percent of the live births in the United States were attended by physicians in hospitals. In 1944, only 75 percent were so attended. In 1944, urban and rural areas differed greatly in this respect. Almost 90 percent of the urban births were attended by physicians in hospitals, whereas the percentage for rural births was 57. By 1961, however, this difference had almost disappeared, the percentages being 98 for the urban births and 95 for the rural births (Bureau of the Census, 1946, 1963).

BELIEFS ABOUT HEALTH

Differences in beliefs about health can be distinguished in different segments of society (Koos, 1954; Suchman, 1965; Zola, 1966). Following this lead, it is reasonable to suggest that beliefs about health in rural areas might be different from beliefs in urban areas. This question is related to the broader question of differences in rural and urban beliefs and values. Sometimes it is presupposed that health beliefs of rural people are closer to folk beliefs than are those of urban people. This assumption needs to be examined.

We get a clearer view of folk beliefs by considering certain cross-cultural situations. Thus, Saunders (1954, p. 144) observes that health ideas prevalent among the Spanish-Americans in our Southwest are derived from American Indians' folk medicine, Spanish and Anglo folk medicine, and scientific medicine. He points out that folk medicine is the common possession of the group and that beliefs are rooted in tradition and seem to be part of the natural order. He observes: "Folk medicine, like scientific medicine, undoubtedly derives much of its prestige and authority from the fact that the majority of sick persons get well regardless of what is done."

Polgar (1963, p. 406) considers the logic of folk medicine and scientific medicine to be similar in that both have an empirical basis. His observation reminds us that professional medicine is eclectic and partly an art.

Freidson (1961) suggests that a useful way of looking at the relationship between laymen and professionals in health matters is to (1) determine how closely their ideas and beliefs regarding health, illness, and treatment coincide, and (2) determine the extent and importance of the lay referral system between the first perception

of symptoms and the decision to see a professional. At one extreme is the situation in which the individual participates in an indigenous lay culture system that is significantly different from the professional culture and is accompanied by an extended lay referral system that may or may not include lay healers. At the other extreme is the situation in which lay and professional cultures are congruent and there is no extended lay consultant system. In this situation, a person is likely to perceive illness in terms of professional definitions and to seek professional help (Freidson, 1961, p. 196–200). We think that neither of these extremes prevails in rural areas. Rather, we think that there is a congruence of lay and professional cultures along with a fairly elaborate lay referral system. This allows for considerable self-diagnosis and self-treatment.

In a study of a small Missouri town, Withers (1966, p. 237–238) found evidence of self-diagnosis and self-treatment.

> In the average Smalltown kitchen, there is a shelf on which sits the family's staple supply of "boughten" home remedies. . . .
>
> The supplies on the medicine shelf are the present-day basic body of "home remedies," having largely supplanted the older home remedies . . . , which were in addition homemade, mainly of leaves, roots, and barks found in the local woods.

Among the home remedies for coughs and colds were honey, field balsam tea, hickory bark tea, and tea made of mullen leaves and hoarhound. Sulfur, blown into the throat through a paper funnel, was a remedy for sore throat; another was sugar saturated with turpentine or kerosene. A gargle for preventing colds consisted of rainwater, salt, soda, and carbolic acid; another consisted of vinegar, salt, and pepper.

In interpreting Withers' findings in Plainville, we should remember that his study was made 30 years ago. Even then, Withers said (p. 242), changes were taking place. "Native attitudes toward recognized physicians and standard medical procedures are a curious hodgepodge of old and new, of suspicious resentment and dependence."

We should also realize that the use of homemade remedies does not necessarily mean a conflict between lay culture and medical culture. King (1962) observes that, to a great extent, home treatment is an attempt to do what the doctor would do if he were there. In our studies of health in rural Missouri, we noted the lack of a lay belief system different from the professional medical culture (Hassinger and McNamara, 1960). This is not to say, however, that the people were well informed about health or much concerned about it.

It has been suggested that dependence on chiropractors and other marginal practitioners indicates the extent to which lay culture is

congruent with professional medicine. McCorkle (1966) points out that, in the United States, chiropractors are the major alternative to M.D.'s for persons seeking treatment for illness. Hamilton (1962), who gathered information in southern Appalachia about health-care preferences, reported that 9.5 percent of his respondents depended on chiropractors and 2 percent on faith healers. His conclusion was as follows:

> Although these data provide only indirect evidence of objective facts, it may be inferred that the norms and values of modern medical science have largely replaced whatever superstitious and unscientific ideas may have existed in the older generation.

Harting et al. (1959, p. 1593) found that middle-aged low-income men in a rural county in Colorado preferred the services of chiropractors to those of M.D.'s, and Koos (1954, p. 105–110) found that lower-class families in Regionville preferred to visit chiropractors. These reports imply that acceptance of chiropractic in certain cultural groups represents rejection of orthodox medicine in those groups.

There is some question as to whether willingness to be treated by chiropractors is a characteristic of low-income groups. Data from the National Health Survey do not confirm such a relationship (National Center for Health Statistics, 1966, p. 37–40). It is true that chiropractors and M.D.'s have different philosophies of healing, but this does not mean that a person who visits a chiropractor does so because he accepts one philosophy and rejects the other. In a study of four rural communities, it was found that acceptance of chiropractic was not negatively related to education and income. A common attitude is that chiropractors are "good for some things," and many people who hold this attitude have some ailments treated by chiropractors and others treated by M.D.'s (Edward W. Hassinger and Daryl J. Hobbs, unpublished data).

In addition, there is considerable evidence that orthodox medicine is widely accepted and that its practitioners are highly regarded by the public (Ben Gaffin and Associates, 1955; Feldman, 1966; Hodge et al., 1964). Most rural families have family doctors (M.D.'s), and the inference is that they have accepted orthodox medical practice (Hoffer et al., 1950; Hay, 1960). Our studies lead us to agree that rural people place high value on regular medical practice (Hassinger and McNamara, 1960).

Feldman (1966, p. 166) found that there is general agreement among population groups as to elementary ideas and facts.

> Regarding the more elementary ideas and facts, the media have penetrated the population so thoroughly that there is very little variation from one subgroup to another—in fact, considerably less variation than has often been held to be the case. One would be hard put to find a subgroup of the population (exclusive, of course, of the Christian Scientists and a few other sects) in which a majority were unaware that early stages of certain diseases were asymptomatic, did not subscribe to the notion of the routine physical, or did not believe that prompt medical attention was advisable when faced with a number of rather common symptoms.

This does not mean that differences with regard to health information do not exist among individuals. Feldman, for example, found that education is related to the level of information about health.

Our general conclusion is that the rural population is committed to professional medicine, and we presume that the urban population is similarly committed.

THE ORGANIZATION OF MEDICAL CARE

Somers and Somers (1961) stated that the organization for providing medical care is being revolutionized.

> In all countries, regardless of differing economic or political systems, medical care is changing from a private relationship between individuals into a medico-social institution or, more precisely, a great network of specialized institutions, which make it possible to provide better care to more people than ever before. The United States is no exception. This is the overriding fact of twentieth century medical care—as it is of education, industry, and government.

Division of labor has been improved. Tasks are separated and assigned with the aim of enabling workers to direct more attention and skill to each task. At the same time, the improved procedures make it possible to match tasks with levels of skill, and some tasks have been simplified (Wilensky and Lebeaux, 1965).

When tasks are divided at one level, they must be brought together at another (Durkheim, 1966; Hoselitz and Moore, 1963). Thus, division of labor in the medical-care system makes it necessary to establish new organizational forms. The fragmentation of medical services and its consequences for treatment of patients have become critical issues.

Among both general practitioners and specialists, "solo" practice is the most common form of practice in this country. The general practitioner in solo practice tends to be the neighborhood doctor in

an urban area or the community doctor in a rural area. Specialists in solo practice tend to be located near one another in professional buildings. There is some evidence that quality is more difficult to maintain in solo practice than in group practice; hence the future of solo practice is in question (Peterson et al., 1956; Clute, 1963).

There is no firm line between solo and group practice. Doctors practice in "associations." The simplest form is an arrangement for sharing a reception room. In more complex forms, doctors practice in partnerships and in groups that include both general practitioners and specialists (Freidson, 1963, p. 306–308).

Primary health services are being offered by an increasing number of public clinics and in neighborhood health centers. Medical care is also available at complex medical centers, some of which are adjuncts of medical schools (Roemer, 1963).

In 1930 about one sixth of the physicians in private practice were full-time specialists; today, about two thirds are (Public Health Service, 1959, p. 27; 1968, Table 78).

Other factors in the medical-care system are social insurance (Medicare), voluntary health-insurance plans, and industrial and union programs for comprehensive medical care. These programs make medical services more accessible in the economic sense. They also change the relationship between patients (clients) and those who provide health services. For example, to obtain Medicare approval, a hospital must comply with certain requirements, one of which is that it establish a committee to review patients' need for continuation of a certain level of care.

The rural-urban discrepancy in physician-population ratios, a discrepancy that always favors urban areas, is often mentioned in discussions of rural health problems (Public Health Service, 1964, sec. 18, p. 24). However, as we have indicated, rural and urban sectors of society cannot be separated, and this is especially true of health services. Because most rural physicians are general practitioners, rural people depend on urban areas for the specialist services they use. A relevant question is: To what extent do rural people have access to medical specialists and the process by which their services are obtained?

The general practitioner is commonly thought of as the point of access to the medical-care system. One of the recommendations of the National Commission on Community Health Services (1966, p. 21) was as follows:

> Every individual should have a personal physician who is the central point for integration and continuity of all medical and medically related services to his patient. . . . He will either render, or direct the patient to, whatever services best suit his needs. His concern will be for the patient as a whole and his relationship with the patient must be a continuing one.

Once contact is made between patient and physician (the theory holds), referral is made and the patient has access to the whole array of medical services. If things actually happened this way, we could feel confident that the services of specialists would be at the disposal of anyone who had a family doctor and that the services would be obtained in an orderly manner.

We studied a situation that seemed ideal for testing the notion that having a family doctor ensures entrance to and progression through the family-care system. Specialists were not available in the area studied. Specialty centers were reasonably close and were used by people in the area. Most families reported having a family doctor. In spite of these facts, the idea that family doctors play a gatekeeper and expeditor role in making referrals to other doctors was not realistic. More than 70 percent of the families that visited both their family doctor and another doctor in a 1-year period visited the other doctor without referral from the family doctor. Thus, from the patient's viewpoint, the efficacy of the system is questionable.

There is no lack of suggestions for meeting this problem, but there is strong resistance in the profession to drastic organizational change, especially to change that would interfere with the one-to-one relationship of doctor and patient.

White (1968) suggested establishing primary medical-care groups as points of first contact for patients. A group would consist of seven physicians: four general internists, two general pediatricians, and one obstetrician. These physicians would be assisted by six nurse practitioners, two nurse midwives, four health aids, a social worker, two laboratory technicians, and two medical secretaries. A primary medical-care group would serve a population of about 20,000. It would be connected functionally to secondary care services (consulting specialists and community hospital facilities), and these would be connected to regional services, which would be located at a complete medical center. Super-specialty services for the region would also be at the center; entry to more specialized services would be through referral.

Suggestions for using auxiliary personnel as practitioners are as important as those for improving the organization of physicians' services. Serious attempts are being made to involve paramedical personnel (e.g., assistant physicians, nurse practitioners, and nurse midwives) more directly in medical practice. The attempts have led to certification and legal problems, chief among which is the problem of personal liability on the part of the paramedical practitioners. The best way to meet these problems is to delegate responsibility. Where this is done, the paramedical personnel work as a team under the supervision of a physician.

Most rural hospitals are small (fewer than 50 beds), and this fact

causes difficulties. Usually, the doctors at a small hospital are general practitioners, not specialists, and there is a lack of specialized facilities and equipment. It is often difficult to maintain a staff. Among the services not likely to be available are outpatient clinics, staffed emergency rooms, and various social, rehabilitation, and home-care services.

Perhaps we should think of a small hospital as a facility where, basically, two kinds of treatment are available: (1) prompt, but only preliminary, treatment for the more complicated conditions, and (2) complete treatment for the less complicated conditions. It is easy to imagine the fitting of hospitals into a coordinated plan. Small hospitals would be at the bottom of the organizational structure, larger hospitals would be above them, and a highly specialized medical center would be at the top. Such a relationship would be similar to the one that exists between general practitioners and the specialists to whom they have access. Although the concept is attractive, coordination of hospitals has not progressed very far.

Before federal support of hospital construction became available as a result of enactment of Hill-Burton legislation, the Public Health Service made recommendations concerning the coordination of rural hospitals with larger ones. It was suggested that a hospital service area be delineated and that an integrated service plan be developed on the basis of several levels of service. Each service area would include a base hospital, district hospitals, rural hospitals, and health centers. The health centers were to provide general medical care for ambulatory patients and preventive health service. In the more isolated areas, they might provide limited inpatient service. The idea was that there would be free interchange among the units and that a person entering the health center would have at his disposal all the resources of the service area (Mountin et al., 1945). State plans under the Hill-Burton legislation followed these suggestions closely in determining the need for additional beds. In general, however, coordination among units of various specializations has not been achieved (McNerney and Riedel, 1962, p. 11–13).

McNerney and Riedel (1962) also reported an attempt in Michigan to affiliate three small hospitals with two larger ones. Financial aid came from the W. K. Kellogg Foundation and the state Hill-Burton agency. The authors stated (p. 155) that without this impetus "agreement would not have been conceived or implemented."

The planners in Michigan believed that regionalization would provide quality care for three small communities, in each of which a small inpatient hospital was built. The two larger hospitals agreed to provide administrative and technical assistance for the small hospitals. They also agreed to provide staff affiliations for physicians in

the small communities. These agreements led to some improvement in administration, but on the whole the Michigan attempt was unsuccessful (McNerney and Riedel, 1962, p. 156).

Despite the difficulty of restructuring hospital services in accordance with a regional plan, some of the provisions in Public Law 89-749 (Comprehensive Health Planning) and Public Law 89-239 (Regional Medical Programs) suggest that further efforts of this kind will be made.

CONCLUSION

In our review of rural health practices, we examined certain differences in belief that exist, or have existed, between rural and urban populations. Our conclusion is that differences in belief about health matters are slight when considered on the basis of residence. In general, both rural and urban populations take a favorable view of professional medical services.

In the future, planning, organization, and allocation of resources are likely to be more important factors in our procedures for providing health services than they are today.

Changes in rural medical care will occur to the extent that the overall medical-care system is made more rational and to the extent that the solo practitioner's role in the system changes.

Paramedical practitioners (assistant physicians, nurse practitioners, and nurse midwives) are likely to find assignments in rural areas, but supervising personnel will probably be in urban areas.

The generalists that Kraenzel (1964) suggests as appropriate for isolated areas are not likely to be old-time general practitioners. They are likely to be practitioners with specified limits of practice and with definite niches in the health care system.

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DISCUSSION

Sidney W. Maurer

It is a pleasure to have a chance to react to Dr. Hassinger's excellent paper. I would like to elaborate on some of the points that he made.

The figures I have seen indicate that about 30 percent of the population of the United States lives in rural areas. Yet 40 percent of the poor people live in rural areas. In spite of this, only 12 percent of the nurses, 14 percent of the pharmacists, 8 percent of the pediatricians, and 3 percent of the psychiatrists live in rural areas. And when you compare the number of physicians in urban centers with the number in some rural areas, you find that the ratio is about 13 to 1.

The comments about the organization and delivery of health services were particularly appropriate. Medicine in itself, I think, can best be described as an antisystem. It is the last of the "pushcart professions."

Dr. Hassinger's comments on folk medicine were most appropriate. Something must be done about incorporating medical practices and techniques into the folk medicine structure. A dialogue must be established between physicians and people who practice folk medicine.

I think Dr. Hassinger is correct in saying that most people who get sick improve regardless of the kind of treatment. If someone believes in using a poultice, well and good; it is not going to hurt him. Indeed, most of our relationships with disease are mental, and if you believe strongly enough in something, you have a positive attitude. The medical profession has not investigated carefully enough the values of folk medicine.

HEALTH SERVICES

Dr. Hassinger had a good deal to say about the organization of health services and the development of a delivery system. Actually, there is none in urban centers, but the lack creates more problems in rural areas.

Health services could be organized in rural areas in ways that would greatly increase their effectiveness. But not many people are interested in reorganizing these services. There are several reasons. An important one is the attitude of many of the rural practitioners, an attitude that is a mixture of provincialism, conservatism, and individualism. The attitude is incompatible with such things as innovation, reorganization, and cooperation.

HEALTH INSURANCE

We hear a great deal about universal national health insurance. Organizations supporting it range from the AMA to the AFL. The number of people supporting it is incredibly large, and this is encouraging. But no matter how desirable this kind of health insurance may be, it is even more desirable, in my opinion, to have a better system for delivering medical care. The insurance would not be worth much without an improved delivery system.

Voluntary health insurance programs have been singularly unimaginative. Such programs tend to put people in hospitals who ought not to be there, with the result that hospital resources are overutilized. The hospitals are used for the wrong purpose, and many of the patients are unnecessarily exposed to infection.

There is a question about third-party insurance that interests me: How can you reverse the incentives? The incentives for

preventive medicine are almost nil in this country. The doctor gets paid because people are sick, and there is little incentive to keep people well. We should look for ways to make preventive medicine profitable for both physician and patient. I think they can be found.

HOSPITALS

On a recent visit to one of our western states, I became convinced that the Hill-Burton Act has had a bad effect on rural medical services. I saw little towns, 4 or 5 miles apart, in each of which there was a 20-bed hospital. You cannot provide adequate health services in a hospital as small as this, and such a hospital cannot be operated economically.

The inefficiency takes other forms. A town of 6,000 population may have one or two privately owned hospitals and a hospital supported by Hill-Burton funds. Or a little town may have two or three hospitals, and in addition, be the site of the county hospital.

These hospitals do not work together. They do not share equipment. More important, they do not use techniques and administrators efficiently.

REGIONAL MEDICAL PROGRAMS

You are probably familiar with various pieces of legislation that provide for regional medical programs.

These legislative efforts have not been very helpful. Nothing much is happening. The people who work in these programs are salaried. They are comfortable, and that may be the problem. There are incentives to do nothing; the money lasts longer that way.

Rural people have not been very vocal about organizing health services effectively. Communities without a physician tend to keep quiet about their need. Moreover, there is no concerted effort by states or regions to improve rural health services. And I do not see much concern on the part of the land-grant universities or the federal government. I will name three federal agencies that, in my opinion, have not done as much as they could to improve our health-care system. They are the Department of Agriculture, the Office of Economic Opportunity, and the Department of Health, Education, and Welfare.

I have decided that most of the foundations are uninterested in rural health problems. I have written letters to foundations in an

effort to get some kind of dialogue going, and I have a file of replies, but not all the replies are in a negative vein.

BUSINESS TECHNIQUES

Those of us who have a special interest in health should think about some of the techniques that work so well in business and industry. Examples are planning, organizing, and centralization of management. We could apply these techniques.

We should give more attention to capitalization. Health services in this country have always been greatly undercapitalized.

We should be concerned about quality control. It is essential in business, but there is little of it in health services. People must become concerned enough to demand some kind of quality control.

MALPRACTICE INSURANCE

I think we should discuss malpractice insurance in relation to rural areas. Most of the little hospitals in rural areas are not accredited, and they do not have good equipment or good nursing staffs. Doctors are afraid to work in them. Last year, I believe, physicians spent $75 million for malpractice insurance. For physicians in some of the surgical specialties, insurance is as high as $15,000 per physician. In California, every practicing anesthesiologist has had some kind of litigation brought against him. How many of these suits have been successful is another matter.

This readiness to sue is something that society must pay for, particularly in rural areas. Fees will increase.

DR. SCHULTZ: Why do you say "particularly in rural areas"?

DR. MAURER: Because those areas do not have adequate facilities, and because of the probability of problems arising there.

DR. SCHULTZ: You have to identify the source of the suits if you make that statement.

DR. MAURER: I know, but what is happening, you see, is that physicians are not going to practice in rural areas. They realize that they cannot do high-quality work in those places. I think this has a definite effect of the level of medical care. They go to the city.

DR. SCHULTZ: That is where the suits start. Something is missing in the logic.

DR. MAURER: The suits start in the cities but if an anesthesiologist is going to pay $10,000 for malpractice insurance, he wants to have all the necessary equipment so that he will not be going out on a limb. Physicians are not going to rural areas. They want to practice where they can feel secure.

There is more to it. Recently health authorities in Los Angeles approached a laboratory that makes measles vaccine, asking to buy vaccine for immunizing all the children in the city. But the laboratory, believing that such a massive program of immunization would result in many lawsuits, refused to sell the vaccine.

I have heard about a similar plan in Philadelphia, where the authorities wanted to immunize children against German measles. The drug companies were willing to sell the vaccine, but the physicians were unwilling to administer it, fearing malpractice suits.

DISCUSSION BY PARTICIPANTS

The discussion brought out the following supplementary points:

1. One relevant index to the state of health in an area is the level of chronic disease that is present. The incidence of heart disease, hypertension, and uncontrolled arthritis is much higher in rural areas, which probably reflects a lack of adequate services or a failure of the services to reach the people.

2. Differences between rural and urban people in health may be due to differences in income available to utilize existing health services. A study that measures the health of rural and urban people in comparable income classes is needed.

3. Infant mortality, postnatal mortality, and undetected nutritional deficiencies (which show up later), along with other clues that reflect deficiencies in health levels in rural areas, are beginning to make it clear that at least the rural poor are receiving very inadequate health services. In addition, the number of draft rejectees from rural areas for health deficiencies is much greater, proportionately, than the number from urban areas. This leads to the conclusion that, at some point in their lives, they have not received proper medical attention. The reason may be that essential services are lacking, or it may be that the rejectees failed to utilize existing services.

4. In comparing rural health with urban health, we take into account the availability of physicians, supporting specialists, and modern equipment. Should we not give more attention to performance?

5. Where health is concerned, the poor cannot speak for themselves. They do not have the knowledge, leadership, communication skills, or organizations to exert influence. The medical profession and public agencies must, therefore, take the leadership.

6. It is useful to make a distinction between individual poverty and community poverty. Many of the differences that we have seen in the quality of rural living in rural areas are due to a complex set of community poverty problems, such as low education, few occupational skills, and poor health services.

7. It is true, of course, that individual poverty limits a person's access to services and facilities. If he lives in a rural area, the limitation is accentuated because the costs of obtaining services are greater. A direct cost is the cost of travel. In addition, when a member of a rural family goes to an urban hospital, other members frequently find it difficult to locate sleeping quarters in the town or city at prices they can afford.

8. A study was conducted in eastern Kentucky to find out why physicians leave the rural scene. Those who left, the study showed, did so primarily because their wives were unhappy in a rural environment.

9. Some physicians, accustomed to the facilities available in medical school, do not have the kind of training needed for practice in rural areas, where facilities are often limited. In a few states, efforts to meet the need for training have been made. One procedure is to set up rural internships. Another is to arrange for professors in a medical school to provide guidance.

10. According to a study made in Missouri, about 40 percent of the doctors in rural areas have urban backgrounds.

11. Much of the medical care obtained by people in rural areas is obtained outside the communities in which they live. Research in a community in southern Missouri revealed that a substantial number of the families were using medical services 75 miles away.

12. We should guard against overstandardizing our concepts of health needs. Different regions, communities, and families have different needs. When we think about families' needs, we must consider difference in income. Some farm families (about 2 million) can afford to travel considerable distances for health services and to pay the high costs of those services, but many cannot. Our aim should be to ensure that people everywhere have access to health services. Therefore, we must have a health-care system that is adaptable to many local conditions and to various kinds of need.

13. In some states, physicians looking for areas in which to estab-

lish a practice find it difficult to identify areas in which there is a shortage of medical services. Most of the state medical societies have a casual approach to collecting information on shortages. The usual procedure is to ask physicians to furnish information concerning the need in their communities. Some persons have suggested that a nationwide survey be conducted to determine the extent to which health services are available in each area, and that the information be made available in the form of maps. Looking at the maps would be a convenient way for a physician to pinpoint the areas of opportunity. Since the health profession is split into specialized fields, it might be difficult to find a group to operate an information service of this kind. Medical societies or health centers could do it if they had the interest and developed the essential procedures.

14. The picture of rural medical services is bleak, but the picture of environmental sanitation in rural areas is bleaker. In many of our poorest rural counties, little attention has been given to the need for pure water and for better ways of disposing of garbage and sewage. These deficiencies contribute to the medical problem.

RUTH M. LEVERTON

Nutritional Levels in Rural United States: New Approaches Needed

The most recent quantitative measurements of nutritional levels among rural families come from the decennial nationwide survey of the food consumption of a representative sample of U.S. households. The survey began in the spring of 1965 and went through four successive seasons. I will use data for the spring of 1965 because earlier surveys were made only in the spring, and some comparisons with a similar survey made in 1955 are pertinent.

As with many other differences that separate rural and urban living, differences having to do with nutrition are narrowing. Nutritional levels are coming closer together, chiefly because the rural pattern is getting to be more like the urban pattern, not because the two patterns are moving toward a midpoint. Spending patterns of farm families changed much more between 1955 and 1965 than did those of urban families. In 1955 the per capita money value of the farm family's food supply was 72 percent of the per capita money value of the city family's food supply. In 1965 it was 80 percent.

One of the major changes in spending patterns of farm families was toward more purchased and less home-produced food (Figure 1). In 1955, 41 percent of the food used in farm homes was home-produced; in 1965, 31 percent.

The drop in home production applied to every food group except meat. In 1955, the per capita consumption of home-produced milk was 7.5 pounds; in 1965, 3.4 pounds. In 1955, about three fourths of the farm households used home-produced eggs; in 1965, about one half.

Another change was an increase in farm families' expenditures for meals away from home. In 1955, 7 percent of the money that

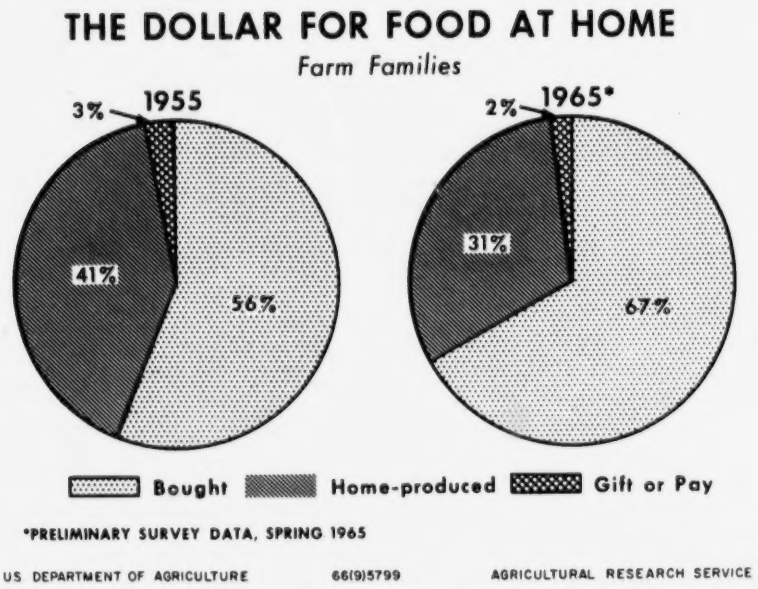


FIGURE 1

these families spent for food was spent for meals away from home; in 1965, 11 percent. In both years the comparable percentage for urban families was about 19.

Increases in spending for convenience foods during the 10-year period are shown in Figure 2.

Let us go on to the use of the different food groups by rural and urban families. A summary of our results is shown in Figure 3, and specific amounts of foods used are given in Table 1. The table also shows the changes that occurred between 1955 and 1965.

Figure 3 should be considered in relation to Figure 4, which shows the percentage of urban and farm household diets that met the Recommended Dietary Allowances for selected nutrients. Because farm households used more of the foods in the milk group (Figure 3), their percentage for calcium was higher (Figure 4). Greater use of the mean group by farm families contributed to their better showing with respect to iron and thiamine. The poorer showing for vitamin A value and ascorbic acid is directly attributable to the lower consumption of foods from the vegetables-and-fruit groups.

A specific example of the effect of shifts in consumption is shown in Figure 5. Note the decrease in calcium in both urban and farm

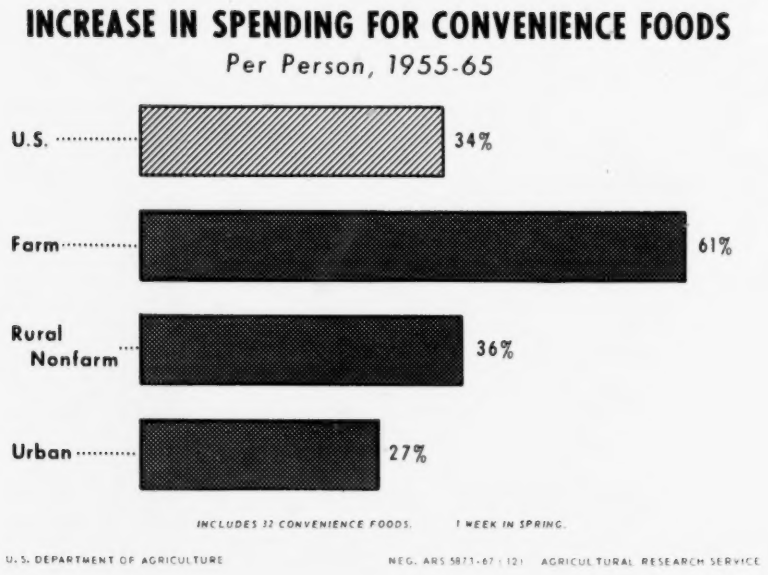


FIGURE 2

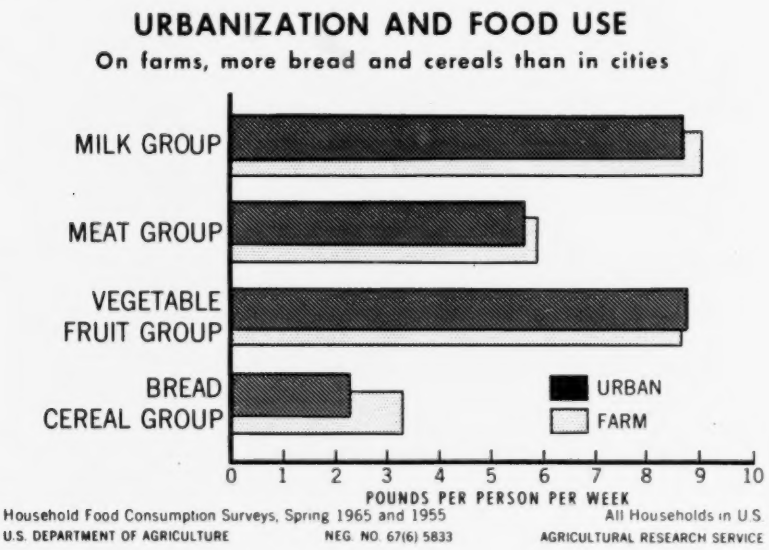


FIGURE 3

TABLE 1 Amounts of Food Used by Urban and Rural Families, 1955 and 1965

Food Groups and Areas	Quantity per Person per Week (lb)		
	1955	1965	Change (%)
Milk, cream, cheese (milk equivalent)			
Urban	9.32	8.71	- 7
Rural nonfarm	9.39	8.86	- 6
Rural farm	11.10	9.03	-19
Meat, poultry, fish, eggs, dry legumes, nuts			
Urban	5.40	5.79	+ 7
Rural nonfarm	4.92	5.44	+11
Rural farm	5.18	5.95	+15
Vegetables and fruit			
Urban	10.20	9.17	-10
Rural nonfarm	9.58	8.86	- 8
Rural farm	9.56	8.94	- 6
Grain products (flour equivalent)			
Urban	2.42	2.46	+ 2
Rural nonfarm	3.22	2.94	- 9
Rural farm	3.86	3.44	-11

food supplies between 1955 and 1965. Note also that in 1965 farm families still had more total calcium from milk and grain products than urban families.

Figure 6 shows the overall quality of diets for urban, rural nonfarm, and rural farm households. In 1965 each group had fewer good diets and slightly more poor diets than it had in 1955. The rural decline in quality of diet changed during the 10-year period. In 1955, 65 percent of the urban households had good diets, compared with 57 and 58 percent for the other two groups. In 1965, the percentages were 50, 48, and 48. The nutrients most frequently below recommended levels were calcium, vitamin A, and vitamin C. In studying the intake of individuals, we found that average iron intakes of infants, girls, and women were below recommended levels.

Figure 7 shows the relation between income and quality of diet. Dietary adequacy, as measured by the percentage of household diets meeting the Recommended Dietary Allowances for the seven nutrients calculated, was related to income. At each successively higher level of income, a greater percentage of households had good diets and a small percentage had poor diets.

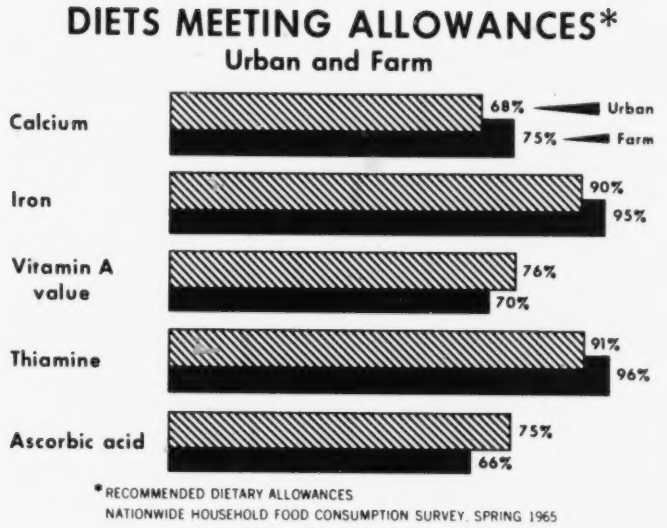


FIGURE 4

The nutritional status of an individual or population group depends on the interaction of many factors. Nutritional well-being is impossible without adequate food, but adequate food alone cannot guarantee nutritional well-being. Any program designed to improve the food and nutrition situation must give attention to medical care, housing, clothing, and sanitation. Accompanying programs in education will be essential to maintain improvement and to provide for continual upgrading of health status and the other aspects of family living.

The existence of a "nutrition gap" has been established, especially among needy, low-income, and otherwise economically disadvantaged or underserviced families. To close this gap will take the skills and resources of many disciplines, as well as adequate funds. To date, programs of food assistance and nutrition education have failed to eradicate malnutrition as a national problem because they have not been available to everyone who needed them. Also, many who needed the programs did not understand them and did not accept them. Finally, funds have been too limited to sustain in-depth programs designed to bring the greatest good to the greatest number.

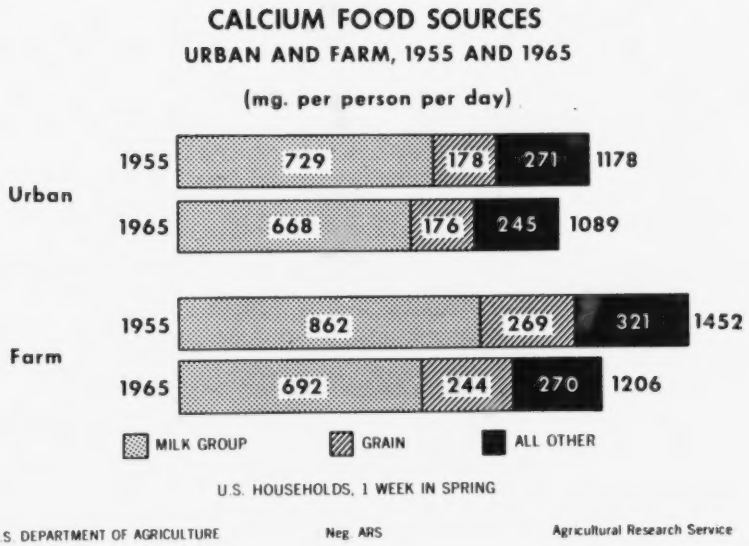


FIGURE 5

New approaches are needed to close the nutrition gap and to keep it closed. There are five objectives to which we must address ourselves.

1. To provide food, or means of getting food, immediately to those who are in acute need.
2. To provide additional food—of the kinds most needed—to those whose diets are marginal because of limited resources.
3. To provide information and motivation to those who have adequate resources for good nutrition but who, because of lack of knowledge or lack of conviction of the importance of food to health, do not have an adequate diet.
4. To provide a continuing program of nutrition education.
5. To provide for continuing research in nutritional needs and food technology as a basis for improving nutritional well-being and the quality and acceptability of food.

It is logical to think of what approaches can be made on a mass scale to serve the entire population, even though some persons may not need to be served. Usually such measures are taken by "government" at local or national levels. Food-aid programs fall in this category. Existing programs differ in their legislative intent and

authorization, in the appropriations to fund them, and in the state, county, and local options available. Also, communities differ in their interest, capability, and resources to use the programs. Nevertheless, each program offers an opportunity for intensifying, through action and education, efforts to improve nutritional status and to prevent malnutrition.

Enrichment of flour and bread is an example of a state program, although it is required in only 30 states. Enrichment is receiving a great deal of consideration just now. Food technology has made it possible, even easy, to add many substances to foods during processing. The recent policy statement issued jointly by the American Medical Association's Council on Foods and Nutrition and the Food and Nutrition Board of the National Research Council indicates a more lenient view toward the addition of nutrients to foods. But there is a difficulty: We do not know whether intricate mechanisms of digestion, absorption, and metabolism can handle such a nutrient load, and whether the tissues can retain it for use as needed during the hours between "doses." Food technology can also make some inexpensive foods with high or low levels of nutrients, but people seem to resist accepting—and paying for—foods with which they are not familiar.

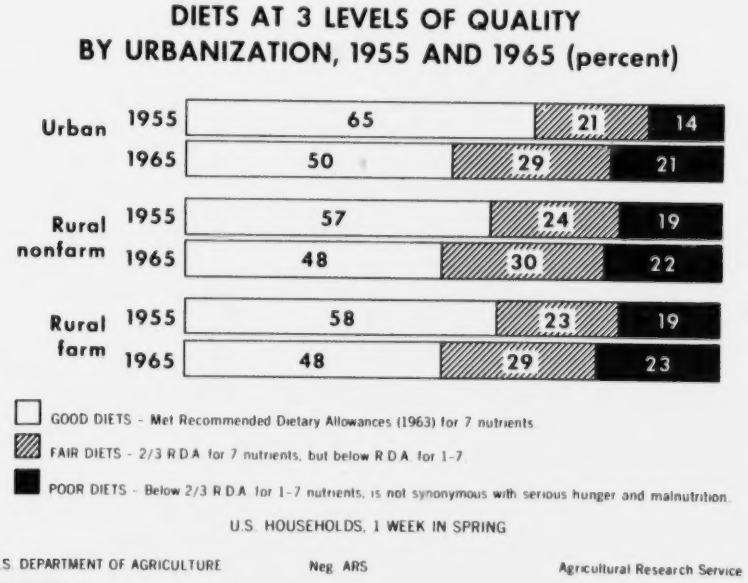


FIGURE 6

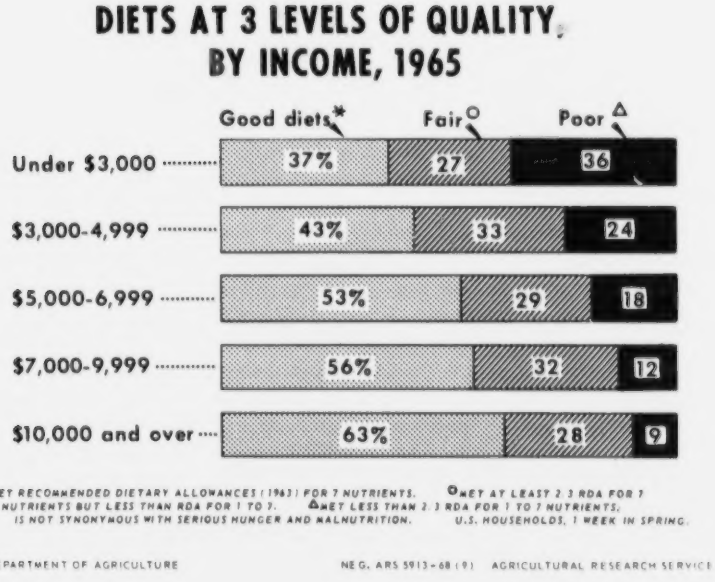


FIGURE 7

"Government" has done much and can do much more to safeguard the wholesomeness and nutritive value of our food supply. At a certain point, however, the individual must take responsibility if he is going to benefit from what government is doing for him. He must recognize the close relation between food and health at every age, and he must eat foods suited to his needs.

To help the individual accept responsibility, we must see that all our programs and efforts are accompanied by education. I hope that in your discussions you will explore educational needs as well as needs for action programs.

DISCUSSION

Paul A. Lachance

As Dr. Leverton pointed out, differences between rural families and urban families in matters pertaining to food use and expenditures are decreasing; the rural pattern is getting to be more like the urban pattern. When I learned of this important finding, made in a nation-

wide survey, I was prompted to search for information on diet quality.

I read, in an Agricultural Research Service report, about families whose diets did not meet the standards set forth in the National Research Council's Recommended Dietary Allowances, and learned that the percentage of urban families with deficient diets was about the same as the percentage for rural families (Agricultural Research Service, 1968).

I wondered how the food groups had shifted, and I found that meat, poultry, fish, eggs, dry legumes, and nuts—all sources of protein—had increased in overall use between 1955 and 1965. A table on nutritive values showed that the largest increase for the 10-year period was a 3 percent increase for protein.

I then became curious about fat and other macronutrients, and I found that fat had also increased (Ruth M. Leverton, personal communication). From this it appears that we are eating foods high in calories, and additional evidence is to be found in the prevalence of obesity, which is a form of malnutrition. I am unaware of any attempt to correlate the findings of the ARS survey with the incidence of obesity. The survey revealed a 36 percent increase in the use of convenience foods, and I wonder how this increase is related to obesity.

Reflecting on the fact that dietary levels are about the same among urban and rural populations, I wondered about the relation between food purchases and income. Who were the wise purchasers? I was amazed to find that the households with the lowest annual incomes (under $3,000) were getting the most for each dollar spent for food (Table 1).

TABLE 1 Income Level in Relation to Calories and Nutrients Obtained in Each Dollar's Worth of Food

	A Dollar's Worth of Food Provided				
Income Level	Food Energy (cal)	Protein (g)	Calcium (mg)	Vitamin A Value (IU)	Ascorbic Acid (mg)
Under $3,000	3,150	99	1,090	6,860	85
$3,000–$4,999	2,860	92	970	6,320	80
$5,000–$6,999	2,570	85	890	5,990	81
$7,000–$9,999	2,380	79	830	5,320	80
$10,000 and over	2,100	72	750	5,180	82

Source: Agricultural Research Service (1968).

It appears that these consumers would provide a good diet for themselves if they had the money, but they would not do so if their food-buying habits became more like those of the affluent. Obviously, there is a need to know much more about the connection between economics and food habits. A related question is whether purchasing food with food stamps has an effect on the choices that the purchaser makes.

The USDA data reveal that in the Northeast 17 percent of the farm households with incomes under $3,000 had poor diets, compared with 35 percent for rural nonfarm households in the same region (Table 2). In the South, 43 percent of the farm households with incomes under $3,000 had poor diets, compared with 42 percent of the rural nonfarm households.

The data do not express the relation between these findings and the incidence of low-income families by race (white, Negro, Indian, Spanish descent), nor do they express the relation between regions (e.g., the Northeast and the South). How do such factors affect food habits? From another source (U.S. Senate, 1969b, p. 646) I learned:

> About half of all the Nation's poor families—one-seventh of the white poor and two-thirds of the nonwhite poor—lived in the South in 1966. Incomes in that area continue to be lower than elsewhere . . .

I believe that any discussion of the quality of rural living, at least when it is concerned with food, should identify the poor more definitely. I believe that the USDA should question the adequacy of the census definitions that it uses in its dietary surveys.

Recommendations for improvement are difficult to make. I am sure we have different opinions.

TABLE 2 Urbanization in Relation to Income and Diet

	Percent of Housewives with Incomes under $3,000 Having Poor Diets				
Urbanization	United States	Northeast	North Central	South	West
All	36	32	36	40	26
Urban	35	32	41	38	26
Rural nonfarm	38	35	31	42	26
Rural farm	36	17	28	43	23

Source: Agricultural Research Service (1968).

Good diets (i.e., those having the potential of providing the Recommended Dietary Allowances for seven selected nutrients) were found in only 5 out of every 10 households. In the other 5 households, about 20 percent of the diets were rated poor (having the potential of providing two thirds of the Recommended Dietary Allowances for seven selected nutrients).

Possibly it would be advisable to reevaluate our enrichment and fortification practices, especially those pertaining to convenience foods. In this matter the attitude of the Food and Drug Administration is reportedly awkward (U.S. Senate, 1969b, p. 632):

> Our [proposed] regulations would prohibit any promotion of these supplements [vitamins and minerals] which alleged that malnutrition was a national problem, that our food supply was deficient in essential nutrients because of soil depletion, etc., and similar misleading promotions that are now made.

The position of the Food and Drug Administration is that a varied and balanced (emphasis mine) diet of commonly available food will provide the essential nutrients, and that public and private effort should be directed toward providing a balanced diet, which would be in contrast with promoting vitamin pills, enrichment, or fortification.

I believe that the testimony of Dr. Margaret Mead is in agreement with my recommendations in favor of enrichment or fortification. She stated (U.S. Senate, 1969a, p. 156):

> Experience of food supplementation and fortification has demonstrated that the route to a better nourished population is by means of commercially available nutritious products, cheap enough, plentiful enough, well enough distributed so that they are available to those who need them. Properly distributed foods, reinforced and fortified to meet special situations, locally deficient diets, poor food habits, unbalanced supplies in federal distribution plans, school lunches which bear a disproportionate nutritional load, must be combined with money enough to buy them if this threat of malnutrition is to be removed.

Dr. Mead has evidently recognized that there are many obstacles to providing a balanced diet.

Further, I believe we must help the hungry regardless of whether they can be identified as malnourished. The food stamp program or some equivalent program has the greatest potential for promoting the nutritional well-being of the disadvantaged family as a whole, whether urban or rural. The objective is to make it possible for the disadvantaged to afford the stamps or food.

I, for one, would reorient the donated (commodity distribution) foods program. This program is not doing the most needy the most good. In my opinion, most participating agencies in the participating counties are school boards that are trying to reduce the cost of their

school lunch programs with donated foods. But closer scrutiny reveals (at least in New Jersey) that the school systems with school lunch programs are in the more affluent urban areas. The poor rural school systems simply are not organized to benefit from the donated food program or the school lunch program most of the time. Therefore, I am advocating the remanufacture of donated foods at the state level and the establishment of a distribution system to benefit all citizens in need of convenient (and possibly enriched as well as fortified) foods.

As for the school lunch programs, I firmly believe that a system free of commodity-oriented stipulations and other restrictions would permit the evolution of uncomplicated feeding systems that would provide nutrients in preferred form to all schools. I am suggesting the development and implementation of new feeding-system approaches for providing nutrients in acceptable forms and requiring minimal food service equipment.

Further, we cannot assume that children are getting proper foods on nonschool days. A program to provide food on nonschool days is also needed. Such a program would be easier to operate in urban areas than in rural areas, but ways could be found to make it work in rural areas.

In summary, I am in favor of innovation in food technology, and I believe that we must have more than our ongoing programs of nutrition education, nutrition surveys, and commodity price supports. These activities seem to be aimed at the periphery of the problem rather than the core.

REFERENCES

Agricultural Research Service, U.S. Department of Agriculture. 1968. Dietary levels of households in the United States, spring 1965. ARS 62–17. U.S. Government Printing Office, Washington, D.C.

U.S. Senate. 1969a. Nutrition and Human Needs. Hearings before the Select Committee on Nutrition and Human Needs, 90th Cong., 2nd sess. (part 1). U.S. Government Printing Office, Washington, D.C.

U.S. Senate. 1969b. Nutrition and Human Needs. Hearings before the Select Committee on Nutrition and Human Needs, 90th Cong., 2nd sess., and 91st Cong., 1st sess., (part 2). U.S. Government Printing Office, Washington, D.C.

DISCUSSION BY PARTICIPANTS

The discussion brought out the following supplementary points:

1. The study of food consumption and dietary levels made by the U.S. Department of Agriculture in 1965 was not designed to take into account wide community differences or differences between income areas of a city. The objective was to provide general information about food consumption and dietary levels in the United States and its four regions. This objective was accomplished.

2. It is difficult to prescribe solutions to nutritional problems because it is not known how the problems differ in nature and cause. For example, there are no dietary studies that separate findings on the basis of ethnic groups (e.g., Spanish-Americans, Italian-Americans, Mexican-Americans, Negroes, and American Indians), and we do not know the effect of nutritional education programs on different economic groups.

3. There is a need for studies of intrahousehold variations in nutrition. Children may get adequate diets through the school lunch program, but other members of the family may have inadequate diets. If the USDA study of dietary levels is correct, the quality of our diet is decreasing in spite of our increased affluence and our continuing surplus of food.

4. Before we can evaluate the consequences of what appears to be an inadequate diet, we must know what the clinical results are. We do not have this information. Such information as we have is directed to problems such as obesity or the relation between diet and heart disease.

5. Changes in people's attidues about foods and nutrition are having some effect on their diets. The decrease in consumption of eggs and the increase in consumption of low fat milk indicates that we are more concerned about fats, cholesterol, and calories. Older people are more concerned about calcium. More of us are weight watchers. For many people, work requires less physical exertion than formerly, and this change reduces the total food intake and the composition of the diet.

6. The school lunch program in some communities may be reasonably effective in improving the diet of children, but other communities do not have the funds to match federal support, as required by law, and therefore do not have school lunch programs.

ROBERT H. MUGGE and DAVID B. EPPLEY

Urban-Rural Contrasts in Public Welfare

The topic assigned to us was "Adequacy of Present Welfare Programs in Rural United States: Requirements for Improvement." It quickly became apparent that there are not enough data to support a discussion of such a complex subject. We propose, therefore, to try to answer a number of questions about public welfare, emphasizing differences between the urban and rural situations. Some of the major questions are as follows:

- How much assistance is being provided?
- To what extent are social services being provided?
- To what extent are the programs reaching the persons who need them?
- What are the living arrangements of recipients?
- How long do they receive assistance?
- What is the migration history of recipients?
- How do recipients compare with respect to age and education?
- What are the circumstances that give rise to need?
- What are the main implications for our urban and rural communities?

We shall try to provide meaningful, although not definitive, answers to these questions. The various tables to which we shall refer have been published by or are available from the Department of Health, Education, and Welfare. These tables differ in the methods by which they distinguish between recipients on the basis of residence (that is, urban versus rural). Three methods are used:

1. The most direct method is to use data drawn from recipient surveys. The most useful tables for this purpose are those in which type of residence is related to other demographic or program factors.*

2. Some analyses can be made by using data showing whether counties are standard metropolitan statistical area (SMSA) counties, non-SMSA counties that are predominantly urban, or non-SMSA counties that are predominantly rural.†

3. The third method permits only very rough analysis, classifying whole states as metropolitan or nonmetropolitan.‡

PUBLIC WELFARE PROGRAMS IN THE UNITED STATES

For the purposes of this paper, "public welfare" is considered to consist of public-assistance income-maintenance and child-welfare programs. Included are the four income-maintenance programs authorized by the Social Security Act: old-age assistance (OAA), aid

*See Tables 5, 15, 57, and 80 in 1962 Study of Recipients of Aid to the Blind: National Cross-Tabulations, April 1968; Tables 5, 14, 42, and 55 in 1962 Study of APTD Recipients: National Cross-Tabulations, January 1967; Tables 2, 27, 29, 40, 42, and 43 in Study of Recipients of Aid to Families with Dependent Children, November-December 1961: National Cross-Tabulations, August 1965; and Table 52 in Characteristics of Families Receiving Aid to Families with Dependent Children, November-December 1961, April 1963. All these materials were published by the Social and Rehabilitation Service (formerly Welfare Administration), U.S. Department of Health, Education, and Welfare. Relevant unpublished data derived from the 1965 study of OAA recipients are available on request from the National Center for Social Statistics, Social and Rehabilitation Service, U.S. Department of Health, Education, and Welfare, Washington, D.C. 20201.

†See Table 27 in Child Welfare Statistics, 1967 (Children's Bureau Statistical Series 92), Social and Rehabilitation Service, U.S. Department of Health, Education, and Welfare, 1968. Relevant unpublished data are available on request from the National Center for Social Statistics, Social and Rehabilitation Service, U.S. Department of Health, Education, and Welfare, Washington, D.C. 20201.

‡States are classified as metropolitan if 50 percent or more of the residents in 1960 resided in standard metropolitan statistical areas. States are classified as nonmetropolitan if fewer than 25 percent of the residents in 1960 lived in standard metropolitan statistical areas. See the following tables in the National Center for Social Statistics reports indicated: Tables 3–6 and 8 in Report A-2, December 1968; Table 3 in Report A-3, December 1968; Table 12 in Report A-2, July 1968; and Tables 3 and 9 in Report E-2, fiscal year 1967. See Tables 1 and 2 in Child Welfare Statistics, 1967 (Children's Bureau Statistical Series 92). All these materials were published by the Social and Rehabilitation Service, U.S. Department of Health, Education, and Welfare.

to the blind (AB), aid to the permanently and totally disabled (APTD), and aid to families with dependent children (AFDC). These are all state programs for which the federal government provides grants-in-aid on a matching formula basis. Grants are also made to states to help support their child-welfare programs.

OAA is a program for needy persons 65 years of age or older. AB is for people who have lost their sight, or have so little vision that they are unable to work, and do not have sufficient income on which to live. APTD is for needy people who are unable to work because they are seriously handicapped, either physically or mentally. AFDC is for families with children in need because of a parent's death, continued absence, disability, or (in 24 states) unemployment. General assistance (GA) is the term applied to public assistance for people who are needy but do not qualify for help under one of the federally aided public assistance programs. It is financed with state or local funds.

In December 1968, the numbers of persons receiving payments through these programs were approximately as follows: OAA, 2 million; AB, 80,700; APTD, 703,000; AFDC, 6 million; and GA, 827,000.

General Program Data

In terms of recipient rates (the number of recipients related to appropriate age groups in the general population), the adult programs tend to be associated with nonmetropolitan areas, and the AFDC programs are heavily concentrated in the central cities of standard metropolitan statistical areas (SMSA's). Figures 1 through 4 indicate the variations.* For all programs, the central cities had much higher recipient rates than the suburban areas within SMSA's. In nonmetropolitan areas, nonfarm areas had higher rates than farm areas.

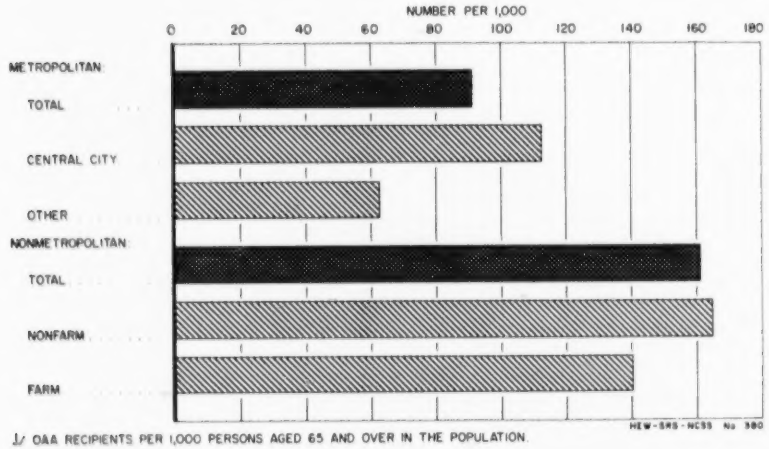
About 90 percent of the GA recipients lived in metropolitan states in December 1968. In their tendency to cluster in metropolitan states, they resembled AFDC recipients.

Size of Assistance Payments

Aggregate county data clearly show that in June 1966 the nonmetropolitan counties paid smaller average monthly amounts to adult

*Studies of the demographic and financial characteristics of the following types of recipients of public assistance were conducted in the years indicated: AB, 1962; APTD, 1962; OAA, 1965; AFDC, 1967. Cross-tabulations by place of residence were not available from the 1967 AFDC study when this paper was prepared, and it was necessary to rely on a 1961 AFDC study.

OAA RECIPIENT RATE, 1/ BY TYPE OF PLACE OF RESIDENCE, 1965



1/ OAA RECIPIENTS PER 1,000 PERSONS AGED 65 AND OVER IN THE POPULATION.

FIGURE 1

recipients than did the metropolitan counties. The predominantly rural nonmetropolitan counties made the smallest average payments to adult recipients in the OAA, AB, and APTD categories. Data from a 1965 study of recipients of OAA confirm the relationship between the amount of assistance payments and place of residence. In that year, recipients who lived outside SMSA's, particularly those who lived on farms, received only an average of $53 per month in OAA payments, as compared with $74 per month for recipients who lived in the largest central cities.

A 1961 study indicates that average monthly assistance payments to recipients of AFDC were higher for families living in SMSA's than for those living outside SMSA's. The relationship existed for white families as well as for Negro families. The highest payments were made to families who lived in the largest central cities. The smallest payments were made to farm families. (See Figure 5 for a more recent chart on average payments for counties of the conterminous U.S.)

Child Welfare Services

In March 1967, child welfare services were provided in metropolitan and nonmetropolitan states at about the same rate. However, according to June 1967 data, the likelihood of being served by full-time

caseworkers was greater in urban counties (86.6 percent) than in rural counties (69.8 percent).

Caseload per Caseworker

With respect to average caseload per caseworker (for adult categories of assistance as well as for AFDC), metropolitan and non-metropolitan states were about the same in fiscal year 1967.

Characteristics of Recipients of Public Assistance

The following data are derived from the nationwide studies referred to earlier.*

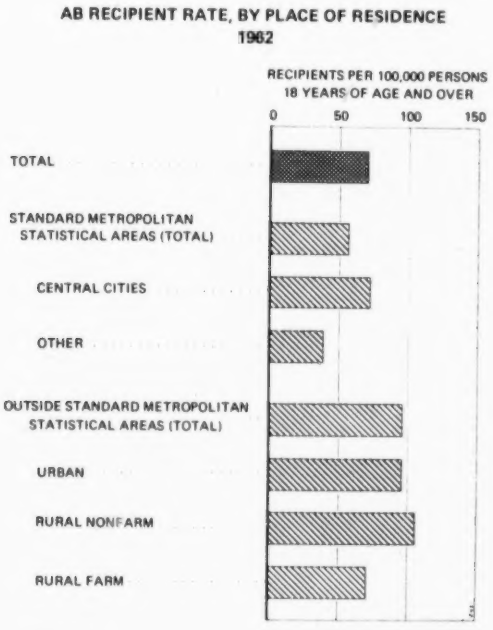


FIGURE 2

*See footnote on page 44.

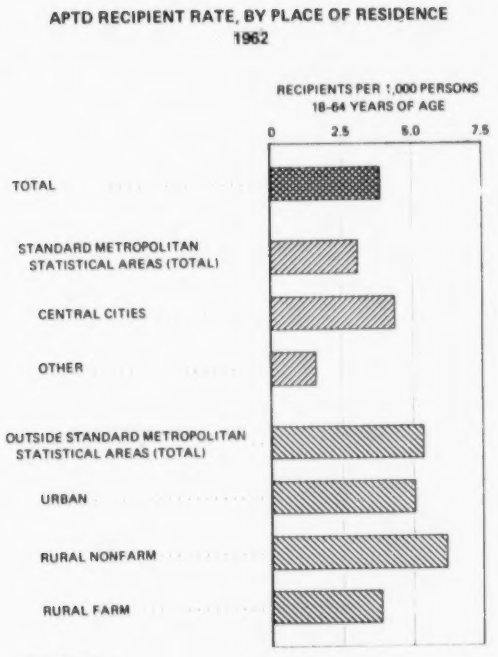


FIGURE 3

Living Arrangements

Data on the living arrangements of adult recipients of public assistance indicate that the proportion of those living in institutions is greater for metropolitan areas than for nonmetropolitan areas. Adult recipients who live outside SMSA's are more likely to live with relatives than are recipients who live in SMSA's. Whites, more than nonwhites, tend to live in institutions.

Length of Time on Assistance

Recipients who lived in SMSA's typically had shorter periods on public assistance than did recipients who lived outside SMSA's. In 1962, the median length of time on assistance for AB recipients in central cities was 5.9 years; for AB recipients in SMSA's but not in the central cities, the median was 5.5 years. AB recipients who lived in rural areas averaged 6.4 years on assistance, and those who lived in urban areas outside SMSA's averaged 6.3 years. Data from the 1962 APTD study reveal that rural APTD recipients were

more likely than those who lived in the cities to stay on the assistance rolls for long periods. AFDC recipients in SMSA's in 1961 had a median length of time on assistance of 1.9 years, as compared with 2.3 years for AFDC recipients outside SMSA's. AFDC recipients who lived on farms in 1961 received assistance payments for longer periods, on the average, than AFDC recipients located elsewhere; their median time on assistance was 2.7 years.

Social Services

Social services provided for AB and APTD recipients in 1962 included arrangements for medical care, services designed to increase recipients' ability to care for themselves, arrangements for homemaker services, and services to improve recipients' housing. Recipients in SMSA's tended to receive these services to a greater extent than those outside. Rural recipients did not receive the services to the extent that others received them.

Amount of Financial Requirements Budgeted

Studies of the amounts of monthly financial requirements (needs as budgeted by the states) of recipients show that the budgeted amounts

AFDC CHILD RECIPIENT RATE, 1/ BY TYPE OF PLACE OF RESIDENCE, 1967

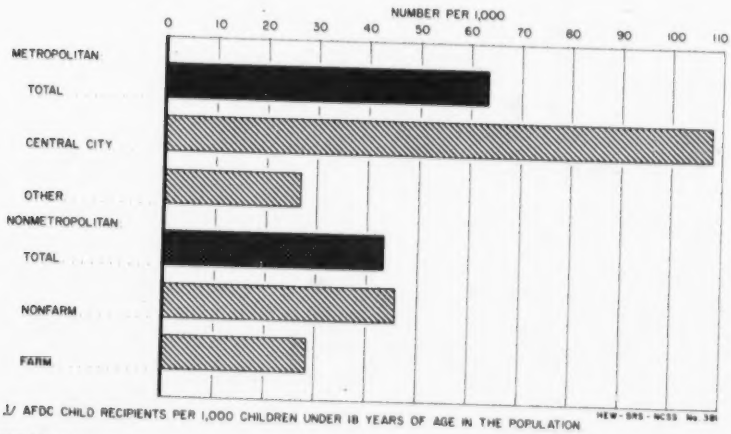


FIGURE 4

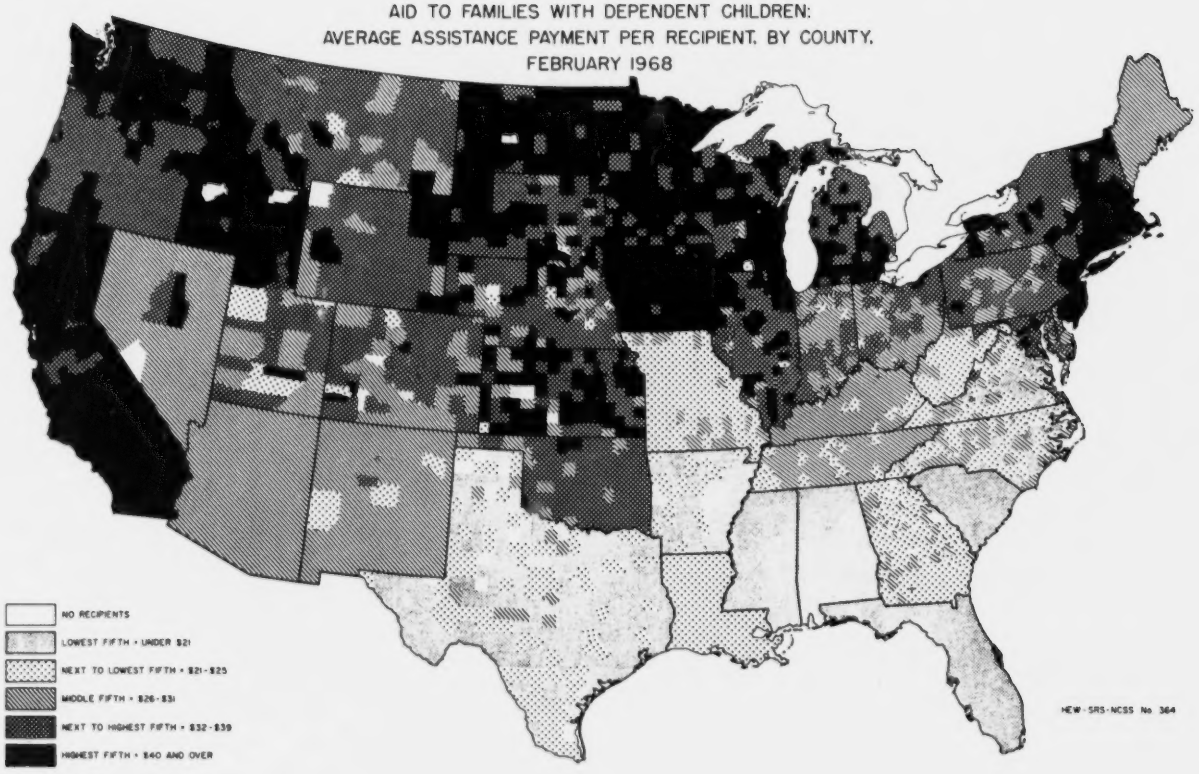

AID TO FAMILIES WITH DEPENDENT CHILDREN:
AVERAGE ASSISTANCE PAYMENT PER RECIPIENT, BY COUNTY,
FEBRUARY 1968
NO RECIPIENTS
LOWEST FIFTH - UNDER $21
NEXT TO LOWEST FIFTH - $21-$25
MIDDLE FIFTH - $26-$31
NEXT TO HIGHEST FIFTH - $32-$39
HIGHEST FIFTH - $40 AND OVER
HEW-SRS-NCSS No. 364

FIGURE 5

were considerably higher for recipients in SMSA's than for other recipients. OAA recipients in the largest central cities averaged $111 per month in total requirements budgeted by the states; those on farms averaged $72. For AB recipients, average requirements ranged from $65 per month, for those on farms, to $119, for those on the urban fringe of SMSA's. The pattern of financial requirements set by the states for AFDC families in 1961 was about the same as the pattern for recipients in adult categories. AFDC farm families averaged $130 per month in total requirements budgeted, whereas AFDC families in central cities averaged $184.

OASDI Benefits

In the 1965 OAA study, attention was given to the number of OAA recipients who where also recipients of OASDI (Social Security) benefits. It was found that recipients of both benefits who lived outside SMSA's were less numerous than such recipients in SMSA's. The OAA recipients least likely to be OASDI beneficiaries were those living on farms. The average monthly amounts of OASDI benefits received by OAA recipients were as follows: recipients living in SMSA's, $49; recipients living outside SMSA's, $41; recipients living on farms, $40.

The 1961 AFDC study indicated that AFDC families in nonmetropolitan states were more likely to receive OASDI benefits than those in metropolitan states.

Mobility

Data on state of birth and data on moving collected in the 1965 OAA study indicate that the metropolitan recipients were more mobile than those who lived outside SMSA's. The findings are summarized below.

	Born in state providing assistance (%)	Had never lived in any other state (%)
Recipients living in SMSA's		
Total	34.8	28.2
In central cities	31.5	25.2
Recipients living outside SMSA's		
Total	63.4	51.3
On farms	77.5	64.8

Of the recipients who had lived in some other state, those living in SMSA's had moved more recently than those not living in SMSA's.

Education

Recipients of OAA who lived in SMSA's in 1965 had more formal education (median: 7 years) than those who lived outside SMSA's (median: 6 years). Recipients of OAA who lived on farms had the least formal schooling (median: 5 years).

It is clear from the 1961 AFDC study that both white and Negro AFDC mothers who lived outside SMSA's generally had fewer years of schooling than their racial counterparts who lived in SMSA's.

Housing

According to reports provided by OAA recipients in 1965, recipients living in metropolitan states were far less likely to live in housing with major defects than were recipients in nonmetropolitan states (Figure 6). Of the 25 metropolitan states included in the OAA mail survey, 16 ranked in the lowest third of the states with respect to major housing defects. In contrast, of the 11 nonmetropolitan states included in the survey, only 4 ranked in the lowest third.

Status of AFDC Fathers

"Status of father" refers to the parental situation that makes a family eligible for assistance. More than three fifths of the AFDC families with incapacitated fathers, and about three fifths of those with deceased fathers, lived in nonmetropolitan areas. About 70 percent of the families with absent fathers, and about two thirds of those with unemployed fathers, lived in SMSA's.

Age of AFDC Mothers

About seven of every ten of the AFDC families in which the mothers were 55 years of age or more lived outside SMSA's; only two fifths of the families in which the mothers were under 20 years of age lived outside the SMSA's. The association between age of mothers and residence was not markedly affected by race.

SUMMARY AND INTERPRETATION

We have presented a few major facts on urbal-ruran differentials relating to public welfare. We must now turn to interpretation.

PERCENT OF OLD-AGE ASSISTANCE RECIPIENTS REPORTING ONE OR MORE MAJOR HOUSING DEFECTS: 1965 OLD-AGE ASSISTANCE STUDY MAIL SURVEY

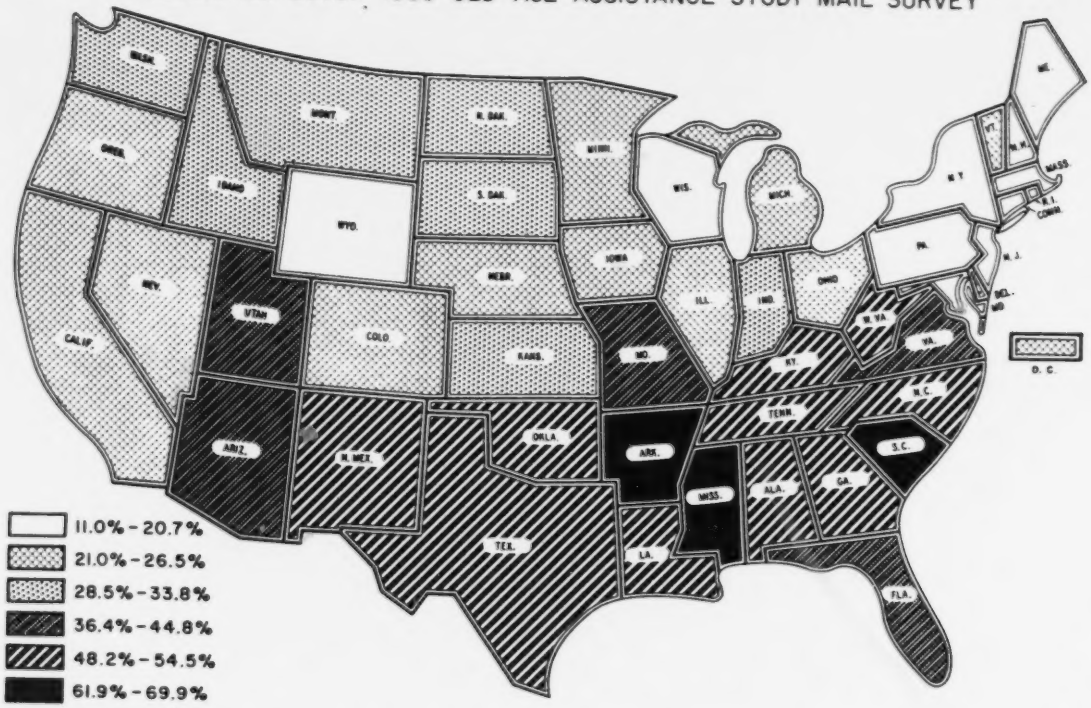


FIGURE 6

Recipient Rates

The facts to be dealt with first relate to the large differentials in recipient rates. The adult programs reach most deeply into the nonmetropolitan areas. Aid to children, by contrast, has its greatest impact in our largest cities.

Essentially, OAA, AB, and APTD are programs for the aging. It seems that, in general, our cities and metropolitan areas provide the best economic protection for the aged and aging. More workers are covered by disability and retirement insurance, and benefits tend to be greater. (Agricultural workers were not covered by Social Security until the late 1950's. The differential derived from the earlier period will gradually decline as more farm workers receive retirement benefits.) Also, we suspect that white collar workers can frequently continue working while suffering from disabilities that would incapacitate a manual worker.

Within nonmetropolitan areas, recipient rates are relatively low for farm dwellers. This suggests that when farmers become old or disabled they can continue to be supported by the farm, remaining in the family farm home while other members of the family continue to operate the farm for the benefit of the family as a whole. This undoubtedly happens in a great many cases. However, when we inquire into the occupations of aged recipients, we find that many of those living in the city and other nonfarm areas had been farmers or farm workers most of their working lives.

We find great variations among states in recipient rates, and much more than urban or rural character is involved. For example, recipient rates are very high in adult programs through much of the South. (In the Deep South, OAA tends to be treated as a pension.) Since the South tends to be rural, this pushes up the rural recipient rates. In the rural Midwest, however, recipient rates tend to be average to low.

AFDC shows the same differentials within SMSA's and within nonmetropolitan areas as do the adult programs. However, there is an extreme concentration of AFDC recipients in SMSA central cities. This concentration results from circumstances that we do not fully understand. Relevant factors probably include racial discrimination, poor education, limited job opportunities, the flight of the middle class to the suburbs, anomie among urban residents, and family disorganization.

Financial Assistance Levels

We have presented considerable evidence that there is a consistent difference between metropolitan, other urban, and rural areas in

financial assistance levels. This difference is reflected in lower payments and lower assessments of requirements for the rural residents. Of course, it is generally held that financial requirements for subsistence are lower in rural than in urban areas. Food and housing are presumably cheaper, and social pressure to obtain the many modern amenities is less. So perhaps the differences are justified; we leave this question for your further study.

The significant differentials in welfare benefits are between the states. You will note extreme variations in the average amounts of assistance provided by the states, and the more rural states tend to give the lowest assistance. As you know, consideration is being given to the establishment of national minimum standards of assistance.

Services and Staffing

There is little contrast between social services in urban areas and those in rural areas. There is some indication that adult recipients in rural areas receive fewer social services than to those in urban areas, and some rural counties are without child welfare workers. To be sure, it is difficult to employ and retain workers in the more remote rural areas; and, because of the distances to be traveled, it is more expensive to provide service to rural areas. It may be that fewer social services are needed in rural areas and small towns, that people in those communities are more self-reliant, that families are more stable, and that the communities are more effective in exercising informal social control over their members. Nevertheless, our aim must be to ensure that a full range of social services is available to all our citizens.

Living Arrangements

The rural recipient of assistance is more likely to be living with his family; the urban recipient is more likely to be living in a nursing home. This is due in part to the greater stability of rural familes and in part to the limited availability of nursing homes and other group living facilities in rural areas. Too often, rural recipients needing nursing home care are unable to obtain it in their communities.

Time on Assistance and Migration

The longer duration of assistance cases in rural areas seems to reflect the greater stability of living patterns in rural areas. The lower migration rates for populations in rural areas are also reflected in the public assistance statistics. The rural resident has fewer options but also fewer pressures for change.

Education and Housing

The lower educational levels, indications of poorer housing, and related differences in conditions of life among rural as compared with urban recipients are consistent with differences found in the population as a whole. However, there is a need for more analysis of the public-assistance findings, which should be related to demographic data for the general population.

Types of AFDC Families

Strong contrasts are discovered between the characteristics and circumstances of urban AFDC families and those of rural AFDC families. In metropolitan areas, most of the AFDC recipients are nonwhite, and about four fifths of the families are "father absent" cases (the father has deserted, or the children were born out of wedlock, or the parents are divorced or separated). In nonmetropolitan areas, the great majority of the recipients are white, and fewer than three fifths of the families are "father absent" cases. A sizeable proportion of the nonmetropolitan families are in need because the father is dead or incapacitated. The proportion is especially high in rural areas. The "father dead" and "father incapacitated" cases tend to remain on the rolls much longer than the "father absent" cases, and this fact helps explain why rural cases have longer duration, on the average, than urban cases.

Overall Significance of Differentials

What, then, is the overall significance of urban-rural differentials in relation to public welfare? We tend to believe that the differences are not of overriding importance.

We say this for two reasons. One is that the metropolitan-urban-rural distinctions are rapidly losing their importance in American life. Few Americans live in a purely rural environment; the cosmopolitan influence is becoming all-pervasive. Modern communications media—television, radio, newspapers, magazines—reach into homes everywhere. Telephones and automobiles are commonplace in rural areas. Industry is moving into the country. Farms are becoming fewer and larger. Thus, urban and rural residents are increasingly finding a common ground in values, attitudes, and knowledge.

The other reason is that the really significant and serious differences in welfare programs are differences between states, not differences between rural and urban recipients of assistance. The states differ greatly in the ways in which they operate their relatively autonomous welfare systems and in the help that they provide. In general,

the states with the poorer welfare programs do tend to be the more rural states. In part, this may be due to the poorer economy of those states. It is said that they are less able to pay their part of the welfare bill, even though the federal government favors the low-income states in formulas for matching federal funds with state funds. Whether their performance is excusable or not, the rural states tend to have conservative attitudes toward welfare programs. The contrasting attitudes of the conservative ruralites and the liberal urbanites may, after all, be the really important rural-urban differential in welfare programs.

DISCUSSION

Paul R. Eberts

The problem of welfare is complex because two interrelated objectives are involved. One is to get people off welfare rolls into some kind of productive activity; the other is to make welfare payments "adequate" for those who are on welfare. Dr. Mugge and Mr. Eppley present two essential facts about these objectives. The first is that rural areas have lower welfare payments than urban areas, and fewer social services are provided for them. The second is that the "more rural" sections of those areas have even lower welfare payments and even fewer social services. They suggested that these differences be rectified by encouraging further efforts by the federal government to establish minimum standards of assistance.

My discussion of the paper will be in three parts: questions of fact, questions of interpretation and theory, and questions having to do with research and policy in the future.

QUESTIONS OF FACT

Three observations should be made regarding the factual material. The first one concerns an assertion about the quality of the data used in the paper. The authors feel that the most useful data are those drawn from surveys of welfare recipients. I have doubts concerning the usefulness of these data. One reason is that they are nearly always collected by agencies for their own use. Surveyed recipients are normally aware of this. We know that bias usually follows such data, but we are never certain what the nature of the bias is. A second reason to suspect the data is that they are invariably pre-

sented in aggregate form, instead of being separated by areas. Without separation, we cannot distinguish between rural and nonrural areas. Hence the information that we are trying to get is often masked.

This seemingly picayune point about data becomes important when we consider a second question of fact, one that the authors, in my opinion, underemphasized. They correctly assert that states with the least adequate welfare programs are poorer states, but there is an aspect that they overlook. Professor Richard Hofferbert of the Government Department at Cornell, in a personal communication on his forthcoming research, notes that these same states allocate a greater proportion of their total income to welfare than do the richer, industrial states.

Moreover, according to certain of the tables referred to in the paper, some states (most of which are rural) make payments to rural counties that are higher than payments to urban or metropolitan counties. For example, the table on old-age assistance shows that there are 16 states in which OAA payments to rural counties exceed those to urban or metropolitan counties. The states are Maine, Massachusetts, Vermont, Michigan, Iowa, North Dakota, Kansas, Mississippi, Louisiana, Oklahoma, Wyoming, Colorado, New Mexico, Arizona, Utah, and Oregon. Of these, only Massachusetts and Michigan are clearly industrial states, and Michigan has strong rural influence in the state legislature. States where payments to rural people are much less include such urban and industrial states as New York, Illinois, Maryland, Hawaii, Connecticut, Pennsylvania, Ohio, Wisconsin, Washington, and California. The same type of relation is seen in the tables on aid to the blind and aid to the permanently and totally disabled. Of course, there is a great difference between payments to rural areas of industrial states and payments to rural areas of rural states. But in rural states, there is comparatively little discrimination against rural counties, and these states spend proportionately more on welfare than do other states. In many of these states there is an attitude that helps them respond, albeit inadequately, to human needs despite a lack of financial resources.

This leads to the third question of fact: an assertion that metropolitan-urban-rural distinctions are rapidly losing their importance in American life. It is undoubtedly true that the technology of mass society is pervasive. But in my opinion this fact does not justify the assertion that "urban and rural residents are increasingly finding a common ground in values, attitudes, and knowledge." First, I am not aware of trend data studies to support this position; second, my own studies seem to indicate that the cleavages by place of residence noted by Lazarsfeld et al. (1944) still exist. My study (Eberts, 1968) was concerned with a set of domestic welfare issues (e.g., the federal

government as an employer of last resort and federal support for schools, health care, civil rights, and school integration). It indicated that on most issues, between 1956 and 1964, there were no convergences among ruralites and urbanites by socio-religious-rural-urban groupings.

QUESTIONS OF INTERPRETATION AND THEORY

What, then, explains the level of welfare payments, and what can be done to improve the situation? As the authors assert, industrialization in certain areas has made welfare a differential problem. But why have only certain areas industrialized? There are many answers, but one must be underscored here. It seems to me that we must begin with an understanding of rural subcultures.

As the authors point out in their comparison of rural subcultures with other cultures, rural subcultures are stable, have low migration rates, are more conservative, and are not as well educated. In addition, we may observe that they have low rates of occupational change, are ideologically more conservative, and tend to be paternalistic and family-centered. We should also note that rural life is physically more exhausting and dangerous. Mining, forestry, and farming require more physical exertion and have greater accident and health hazards than do most urban industries.

Because of these characteristics, we find in rural communities a set of institutions that express and reinforce moral values that are based on admiration for individuals who are strong (physically and morally) and independent. When we understand the rural ideology, we understand why people in rural areas tend to support programs having low tax requirements. In their view, welfare programs for the able-bodied should be temporary, lasting only long enough to enable recipients to get back on their feet.

The ideology also explains why rural people tend to be more authoritarian and less mentally alert than urban people. Because of the nature of the subculture (stable and nonintellectual), rural people are inclined to emphasize personality and individual strength in their thinking, rather than social or group considerations. Another effect of the ideology is to resist changes imposed by outside forces.

My use of the term "authoritarian" in reference to rural people may be objectionable to some.* One of the first extensive discussions

*The statement that they lack mental alertness may also be objectionable, but this lack is a function of lower education and of fewer cultural advantages in small communities. See Lipset and Bendix (1959, pages 219–225).

of authoritarianism as a characteristic of rural people was by Adorno et al. (1950). S. M. Lipset (1959) pursued the subject in a famous article in which he maintained that the working class was more authoritarian than the middle class and implied that, for this reason, the working class was not to be trusted. Several rebuttals have been published. The one most damaging to Lipset's thesis was by Hamilton (1966), who stated that if recent migrants from rural areas were removed from the samples of working-class people used in the analysis, working-class people would be the least authoritarian people in the urban population. The implication is that the most authoritarian people in the population are those in rural areas who are about to migrate to the cities. Persons migrating from rural areas to cities tend to be average young men recently socialized by rural institutions, and they tend to have in them the get-tough, individualistic attitudes fostered by those institutions. For example, they support war and more violent means of advancing foreign policy much more than people in the rest of the urban working class (Hamilton, 1968).

Rural institutions support individualism and independence, qualities that seem anachronistic in an era of functional specialization, interdependence, cultural diversity, and pluralism. These qualities may reduce social conflict, but they do not contribute to social integration and achievement. The individualism is not the kind that provides motivation for "getting ahead" in an occupation. Lipset and Bendix (1959) state that occupational upward mobility rates by rural people are considerably below those of urban people.

Solving the problem of rural welfare requires more than raising federal standards for welfare recipients. The problem is economic, but also social and political. Some resources should be diverted from present federal expenditures for this purpose. Ultimately, however, higher welfare standards in rural areas will be possible only if economic growth has been accelerated. And for this to happen, we must have changes in institutions, attitudes, and values as well as changes in federal programs. The greatest need, it seems, is to bring modern institutions and growth into rural areas without bringing socially disintegrative policies with them. The fact that programs in urban areas improve more rapidly than those in rural areas is also demoralizing for those left in rural areas. Just to bring people in poverty out of poverty is not enough; we should also give them an opportunity to contribute to economic growth and social integration.

I am reminded of the research associate at Cornell who was field director for a project entitled "Sources of Creativity in Small-Town Life." After a year in the field, he concluded that there was virtually no creativity in small towns. He asked himself, "Why not?" The result was the book Small Town in Mass Society (Vidich and Bensman,

1959). The authors assert that local initiative in the town they studied was so dominated by influences from the mass society that little opportunity and only a few resources were available for locally determined decisions. Hence creativity became virtually impossible for such communities.

QUESTIONS OF RESEARCH AND POLICY ALTERNATIVES

Alleviation of rural poverty requires extensive changes in the organization of rural communities. At present, however, we do not understand why some communities change and others do not, why some forge ahead and others lag behind. Thus, the first order of business is to investigate more thoroughly the nature of community dynamics. We are engaged in pilot studies of this nature at Cornell, and I would like to discuss them briefly.

In a paper prepared for presentation at a meeting of the Rural Sociological Society, we assert that community problem-solving has three dimensions.* The dimensions are concerned with resources, competition, and differentiation.

Resources. A community must have resources in order to function. Most communities do not have all the resources they need; they must get resources by trading with other communities. By trading, they form regional links, or interdependencies. Communities that participate in these regional arrangements grow more rapidly than those that do not, and the fastest-growing communities are those that form political as well as economic links.

Competition. Competition is more likely to occur in politically linked towns than in others, and this fact, we believe, helps explain why such towns are likely to grow rapidly. Competition promotes fluidity of ideas, information, and resources in a community. In a town dominated by one large corporation, there is little competition and little fluidity of ideas. The corporation is interested in keeping other corporations out and in keeping wage rates low. But if three or four corporations are in a town, they compete, and employees get the idea that they can improve themselves by shifting from one job to another. The competition leads to economic growth for the entire area.

Differentiation. When residents of a community can choose from a wide range of activities, they have the advantage of differentiation.

*Paul R. Eberts, John Eby, and Pluma Kluess. "Community Structure and Poverty." Presented at meeting of the Rural Sociological Society, San Francisco (1969).

We have been working with a nine-point scale of differentiation developed by Ray Wakely at Cornell in the early sixties. The points on the scale correspond with businesses and services that may be found in a town. The lowest level on the scale is a grocery store, because almost every community in New York state with a population over 2,500 has at least one grocery store. Higher in the scale are a plumbing shop, a restaurant, a furniture store, a chamber of commerce, and, at the top, a television station. Other types of differentiation are, of course, possible. In some communities, manufacturing predominates; in some, service industries predominate; and in some there is a mixture. We would say that communities with a mixture would have the most differentiation.

Our major hypothesis is that the effectiveness with which a community solves its problems depends on the extent to which it has the proper resources (linkages) and on the extent to which competition and differentiation exist in the community.

This hypothesis has certain implications with respect to poverty and welfare. One is that a federal agency committed to combating poverty is obliged to do more than provide money for people on welfare rolls. An additional responsibility, it seems, would be to help communities solve their problems.

Several things can be done immediately to develop policy in this area. First, we can focus on communities and their institutions as units of analysis in an extensive program of coordinated research. Second, under controlled research conditions, we can develop pilot projects to determine the effectiveness of policies formulated on such a conceptual basis. Third, we can begin extensive monitoring of the structures, institutions, and processes in rural communities on the quality of living in them, including, of course, the topic areas being considered at this conference. Excellent data for communities with populations over 10,000 are already available on the tapes of the County and City Data Book. These data and others should be made more generally available. Without such data it becomes impossible to determine the changes in welfare and their correlates in rural communities, and it becomes less likely that the welfare of rural communities will be adequately improved.

If these suggestions could be implemented, we might find that government programs for different areas would take different forms, and the monitoring, presumably, would help determine which kind of program might be most appropriate for a given area. In some areas, it would be desirable to develop linkage; in others, competition; in others, differentiation.

In any case, such changes would affect the whole population in given rural areas by integrating people there more effectively into the larger society.

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DISCUSSIONS BY PARTICIPANTS

The discussion brought out the following supplementary points:

1. States differ in their welfare standards. In some states, there are program variations among communities. The rural poor are most likely to be slighted. If the poor of any area belong to one of the minority groups, the neglect is likely to be greater for them.

2. The quality of training received by rural case workers is frequently below that received by urban workers. Rural case workers often have little specialized training, and what they do have is likely to be more relevant to urban areas than to rural areas.

3. Some rural areas have no public transportation. Low-income families often cannot afford the tank of gas that is required to pick up their surplus commodities, get their food stamps, or obtain medical attention.

4. Some rural communities are not as conservative as one might think. Contrary to the impression that many persons have, rural churches often contribute to the willingness to change. Young ministers frequently start by serving a rural church, and they are likely to have many new ideas. It is true that in some communities churches tend to hamper change.

5. A study at Cornell shows that political competition and liberal attitudes have the highest correlation in communities with populations between 100,000 and 250,000, and that communities with populations over 250,000 have a more conservative approach to change.

6. A city's location affects its willingness to accept change. Cities in agricultural regions differ in this respect from cities in industrial regions.

THEODORE W. SCHULTZ

Possibilities for Improving Rural Living: An Economist's View

The rural sector keeps on shrinking and the rural population mix keeps on changing as the economy reshuffles the economic opportunities open to rural people. The dynamics of this process are influenced by policy, and, one hopes, policy is not immune to knowledge. But policy is often murky, and there are decided gaps in our knowledge. Our task, therefore, is to clarify policy choices and establish research priorities.

Let us review some recent developments and the policies associated with them.

- During the Great Depression, the United States launched massive farm commodity programs to raise farm incomes, programs that soon became regressive in their effects on the distribution of personal income within agriculture and built up strong vested interests.
- The extraordinary migration from rural to urban communities that followed, partly as a consequence of the farm commodity programs, brought millions of poor rural people to the cities.
- The plight of the cities then began to dominate the policy and research agendas of social analysts, who responded with massive programs designed to alleviate it. These programs are like the farm programs of the thirties in that they tend to be regressive and to create groups with vested interests.
- As the urban poor received more attention, the rural poor received less. We should note these facts about the urban poor: first, although they have the spotlight, they are not as poor as the poorest in our rural communities; second, most of the urban poor are refugees from rural areas.

I shall not address myself to policy choices. One reason for not doing so is that most of my professional work has been in this field and is known to you. Another is that the federal government has issued good reports on policy choices in the last few years. The People Left Behind (President's National Advisory Commission on Rural Poverty, 1967) is a landmark. People of Rural America (Hathaway et al., 1968), although not policy-oriented, is first-rate for the purpose at hand.

Instead, I shall discuss our research enterprise, concentrating on questions having to do with welfare and with improvements in rural living. If a prize were offered for a new approach to research on the problems of rural living, it should be a large one. The winner would have to be concerned with changing possibilities for improving rural living and with changing preferences. He would have to identify, explain, and rate these possibilities and preferences. It would be a formidable task.

In both theory and practice, the task of determining the possibilities and choosing among them defeats us. In our social accounting, we have no equivalent of the gross national product. We have no gross social product, and of course no net social product. Our professional colleagues in government have compiled an abundance of data on health, nutrition, housing, social security, crime, migration, education, and income. But we have no way of totaling these data. We are bloated on them, unable to digest them. An attempt to integrate the data was made in Toward a Social Report (U.S. Dept. HEW, 1969), but our information is still full of puzzles.

ALTERNATIVE APPROACHES

No one is against improvements, provided they do not require giving up something else of value. To strive for an ideal goal is to be commended, provided it is my ideal. I know that the idealism of some strong-armed students is not compatible with my notions of a university community that relies on reason, dialogue, and persuasion. We prefer the optimum, but we are prepared to settle for less and call it second best. But who knows what either of them means? It is always easier and safer to make comparisons.

I am convinced that there is no meaningful concept of the ideal rural life for all people or for a sector of society. A poet may reveal some of the preferred attributes of rural living from the vantage point of his high-rise apartment. But his imagination and command of language are not a substitute for social analysis.

Comparative analysis is severely limited, although it is our forte.

If we compare rural people in Denmark with Danish society as a whole, and rural people in the United States with United States society as a whole, we can show that in this relative sense rural people in Denmark are better off than rural people in the United States. But how does such knowledge help us improve our situation? Sweden and some of the countries in western Europe have gone far in efforts to make economic opportunities in rural areas equal to those in urban areas. Schooling in rural Japan is probably better than schooling in most of rural America. Yet how useful is such information to us in view of our geographic size and the institutional, cultural, and even economic heterogeneity that is embedded in our social and political structures?

Doubts also arise concerning the usefulness of comparative studies of consumer durables, housing, and social services. We know, for example, that distribution of income is substantially more uneven among farm families than among nonfarm families in the United States. But this fact by itself tells us very little about how we might allocate resources to improve rural living.

Despite the limitations of comparative studies, I do not intend to imply that we should discontinue making them. Instead, I want to underscore what I am sure is obvious: they fall far short of what we need as a basis for sound decisions.

The concept of an optimum is more useful, at least in economic analysis. Although it is difficult to apply and is far from acceptable to many social analysts, it is the approach on which I shall rely.

PREFERENCES AND POSSIBILITIES

Making social choices means taking account of benefits and costs in arriving at optimal decisions. The process is difficult to apply even in circumstances where institutions, preferences, and possibilities are constant. Thus we can expect unusual difficulty as we apply it to the objective of improving rural living, because we must deal with institutions, preferences, and possibilities that are changing. Nevertheless, it is the right road to take.

Many congressmen have voted for price supports and direct payments to farmers in the belief that these programs would reduce the inequality in the distribution of personal income. For the same reason, they have voted for minimum wages. But the income effects of these measures do not support them. Then, too, many social analysts believe that the possibility of improvements in rural living depends primarily on an increase in the welfare services provided by the public sector, that funds available in the public sector for this pur-

pose are inadequate, and that a reallocation of the national product in favor of the public sector is therefore necessary. This view is also vulnerable.

There is a strong tendency among social analysts to list their particular objectives of welfare and then state the institutional and economic steps deemed necessary for attaining them. But this is not a satisfactory approach, for the following reasons:

- The preferences of the poor whose lot is to be improved are distorted by some public programs.
- Some programs impair the capacity of the economy to produce income streams, even reducing the earnings of the poor people.
- The approach does not take into account the increased income that poor people can earn for themselves as a result of better allocation of resources in production.
- The approach does not equate the costs of public services with the benefits that they produce.

My approach to welfare will emphasize economic values. The propositions that follow rest on the assumption that resources account for the productive capacity from which we obtain income streams, and that these streams make welfare services possible.

Effect of High Employment Level

It is highly probable that the success we have had since 1960 in moving employment in the United States from relatively low to high has done more to improve the welfare of poor people (both urban and rural) than additional public welfare services have done. The implication of this proposition is not that welfare programs are unnecessary but that they have been secondary to increases in workers' incomes. A high level of employment is attained and maintained primarily as a result of national fiscal and monetary policies, not as a result of urban or rural policies.

Need for Additional Income Streams

Despite the high employment level, the economy is not producing income streams at an optimum rate. Some resources are not used efficiently, and some investment opportunities with high rates of return are neglected. Some disequilibria represent unrealized opportunities to produce income streams. Rural people are especially vulnerable to these disequilibria.

- Because of their location and their pattern of employment, many rural people are unable to take advantage of job opportunities.
- Rural people are under a heavy educational disadvantage.
- Distortions in the use that is made of the factors of production in agriculture for reasons of public policy exact a high price in terms of foregone income streams.
- In general, we have done well in allocating resources to agricultural research, but the additional gains that could be made from such research are underestimated (T. W. Schultz, 1969).

Size Distribution of Income

According to T. P. Schultz (1969), studies by Kuznets (1955, 1963) show that "in the more developed countries the size distribution of income among persons and families has become less unequal during the twentieth century." These changes in distribution appear to result from changes in functional income that are inherent in the process of modernization. In the aggregate, the relative size distribution of income in the United States has not changed substantially since World War II. However, if one adjusts for the flow of young people and married women (low-paid groups) into the U.S. labor force, one finds that the inequality of income is thereby reduced (T. P. Schultz, 1969, p. 98).

Level of Schooling

In 1962, I advanced the hypothesis that increases in the formation of human capital relative to increases in the formation of nonhuman capital reduce inequalities in the distribution of personal income (T. W. Schultz, 1962). Chiswick (1967, p. 35) shows that the level of schooling has a measurable effect on North-South differences in inequality of incomes. To the extent that the rate of return on this form of human capital is as high as, or higher than, the rate on alternative investment opportunities, two objectives are achieved: the national product is increased, and inequality in personal income is reduced.

Inequality of Farm Family Incomes

An analysis of the inequality of farm family incomes by Gardner (1968) shows the following:

- Migration and multiple earners are among the strongest variables in reducing income inequality in the short run, whereas off-farm work is strong in reducing long-run inequality.

- Inequality of schooling does more to bring about long-term inequality of income than any other factor.
- Expenditures for research and extension give results that are statistically ambiguous.
- If the capital going into agricultural production is increased without a proportionate increase in labor, an increase in long-run inequality of income results.
- Government payments contribute significantly to increasing the inequality of income.

Institutional Lags

In a paper on "Institutions and the Rising Economic Value of Man" (T. W. Schultz, 1968), I showed that the rise in the economic value of human agents makes new demands on institutions, that there are lags in adjusting to these demands, and that the lags cause serious economic problems.

Institutions that render services to the economy are viewed here as variables in the economic domain. As the economic value of human agents rises, these institutions lag in their responses to (1) increases in the market price of work, (2) increases in rate of return on investment in human capital, and (3) increases in consumer disposal income.

The first lag occurs in the realm of internal migration, occupational shifts, and economic discrimination. The results are inadequate job information, inadequate on-the-job training, and discrimination in the rationing of housing in areas where the number of jobs is increasing.

The second lag has to do primarily with the supply of educational services for many rural children, for poor whites, and for Negroes.

The third lag impairs consumer sovereignty. The central problem is one of accessibility where rationing occurs as a consequence of discrimination. Such rationing limits accessibility of housing, health services, and information on family planning.

There is a lag in awareness on the part of many parents, especially the poor, who usually have the least schooling, as to what are wise investments for the welfare of their children in such things as nutrition, health, and housing. Because of lack of knowledge, their preferences lag behind those of the middle and upper income classes. There is a strong argument for spending additional public funds on an educational program directed toward helping parents make decisions in the areas mentioned here. The information that parents need cannot be expected to come from advertising alone.

These six propositions will not take us directly into the Promised Land, but they can help us establish research priorities and thus reduce our wandering in the wilderness.

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ROBERT M. ISENBERG

Quality of Rural Education in the United States

In view of the direct relationship between the quality of education and the quality of living, it can be asserted that rural people have a history of being short-changed. Our educational literature is filled with descriptions of the inadequacies of schools in rural areas, suggestions for improvement, and pleadings for corrective action. Rural schools have been referred to as the "mired wheel on the vehicle of educational progress."

Despite this history of inferiority, education in rural America is vastly different today from what it was three decades ago. There have been substantial improvements. Since most of them have been recent, a brief review may be helpful.

PROGRESS IN RURAL EDUCATION

The most dramatic change in rural education has been in its legal structure. The schools themselves have changed.

Three decades ago, the educational opportunities available to most rural children were those provided by the "little red schoolhouse." Most children received their elementary education in a one-, two-, or three-teacher school. Those desiring a secondary-level education generally attended the high school in a nearby town, often finding it necessary to board in town.

Today, rural children ride a school bus to a consolidated school. Although most of the high schools they attend are in town, it is not unusual to find modern school-building complexes in open country. Since school consolidation usually requires the construction of

new buildings, school children in rural areas probably enjoy better physical facilities than do those in the cities.

School districts have been reorganized throughout rural America. Thirty years ago the United States had more than 125,000 school districts. Today there are fewer than 20,000. Some rural school districts have been joined to form new school corporations. Some have been joined with town and village districts and some with city districts. More recently, the process has continued with the merging of reorganized school districts.

The process of restructuring school government has been drastic and widespread. Illinois once had more than 12,000 school districts; it now has only slightly more than 1,200. Kansas reduced its districts from 1,500 to 349 in a single year. The fact is that the structure for public education has been reorganized more extensively than that for any other government activity.

The reorganization of districts has made possible a number of impressive achievements. High school education has been made available to every rural youth. Libraries, laboratories, music, dramatics, athletics, and counseling are part of the rural school experience. The consolidated schools tend to have a more diversified educational offering, up-to-date instructional materials, well-qualified teachers, and students with higher achievement levels.

REASONS FOR SLOW PACE

But progress has not been as great as it should have been. The improvements have come too slowly; they have not kept up with the expanding need for educational programs. Large numbers of our rural youth are migrating to cities, trying to find satisfactory nonfarm employment in their rural area, or going on to some form of higher education without adequate skills or sufficient understanding of what the world outside is like.

One reason for the slow pace of improvement in rural education is that most of the reforms have been resisted by rural people. In countless communities, for example, "school district reorganization" and "school consolidation" have been fighting words. Friendships have disintegrated, families divided, and communities split apart over the reorganization issue. In the same way, rural boards of education have resisted state financial support and chafed over regulations requiring even a minimum of certification for teachers. Their voices have been prominent in state legislative halls, and in most instances they have opposed the developments I have identified as progress.

A detailed discussion of this rural opposition is beyond the purpose of this paper. Certainly there has been fear of excessive taxation, of small children riding unreasonably long distances on a school bus, of town people usurping control of decision-making, of the gradual loss of a familiar, secure way of life. The opposition has been more emotional than rational.

Let me add two personal observations. The first comes from a great deal of experience as a promoter of school district reorganization. I have become convinced that rural people oppose reorganization and consolidation efforts, not because they are against improving the schools their children attend, but because they lack understanding of what a quality education program includes and what it requires. Naturally, their perspective is based on their own experiences with schools—the schools they attended and those they have observed or heard about. Their awareness of educational developments does not go beyond the range of their personal contacts. I am saying that rural opposition to reorganization and consolidation, although misdirected, is largely honest.

My second observation relates to rural people's level of expectation with respect to education. It is low. There seems to be a general willingness to accept less than the best. Rural people know or at least suspect that somewhere things are better. But they are held back by a subtle defeatism; they hesitate to seek these better things for themselves.

To further illustrate rural resistance to educational improvement, I will describe an exciting type of organizational restructuring that is in progress in 15 states. At the heart of the restructuring is the creation of an echelon of authority between local school districts and their state education agencies. The middle echelon is often called an intermediate school district. The legal names in New York, Wisconsin, Texas, and Oregon are, respectively, Board of Cooperative Educational Services, Cooperative Educational Service Agency, Educational Service Center, and Intermediate Education District.

These new organizations can best be described as regional service agencies. In general, they serve all the local school districts in their areas by performing functions that are highly specialized or require a large population base for efficient operation. They operate instructional materials centers, diagnostic clinics, data processing centers, curriculum and staff development programs, vocational and technical education programs, and various programs for handicapped children. Some programs are under way.

Legislation providing for Boards of Cooperative Education Services in New York was enacted in 1948. The law has been amended many times. In 1968 it was amended to give the boards authority to purchase land and construct buildings.

Legislation authorizing establishment of a statewide network of Cooperative Educational Service Agencies was enacted in Wisconsin in 1963. It also provided for eliminating the office of county superintendent of schools. Nineteen of the agencies have been established. Although they are poorly financed, they provide types of educational service that local school districts, acting individually, could not provide.

Twenty Educational Service Centers were established in Texas in 1967.

Iowa has created 16 regional school districts, each of which was to include a community college or an area vocational-technical school, or both. In addition, county boards of education can merge within the boundaries of these 16 areas to provide various specialized services for local school districts. Thus far, county boards have merged in nine of the areas.

Although regional service agencies can bring clinical psychologists, speech therapists, instructional materials, and mathematics, science, or reading specialists directly to the smallest rural school, rural people in some areas resist the idea. Experience in Nebraska is an example. In 1965 the Nebraska legislature created 19 Educational Service Units. Each unit has a board of education, a mandate to develop services for local school districts, and a modest tax-levying authority. The law provides that any county wishing to withdraw from the regional program may do so. The counties that have elected to withdraw are among the "most rural" in the state.

The idea has also been resisted in the state of Washington. Legislation enacted in 1965 directed the state board of education and each county board to participate in planning intermediate school districts. Although planning was mandatory, adoption of the program was on a referendum basis. The more populous areas adopted the new structure, but referendums tended to fail in rural areas. As a result of this rural resistance, the Washington legislature in March 1969 directed the establishment of intermediate school districts throughout the state. This legislative action also provided for the selection of intermediate school district superintendents by appointment by boards of education rather than by popular election.

Most of these multi-county regional service agencies are less than four years old, but reorganization is continuing, and the future is brighter than the present. Most of what can come from restructuring is ahead.

BASIC NEEDS IN RURAL EDUCATION

Comprehensive Programs

Educational programs in rural areas need to become more comprehensive. Most are extremely limited. The high schools are offering little that prepares rural youth for entry into the labor market. And not nearly enough rural young people as yet have access to an area vocational-technical school. Also generally lacking are educational programs for rural adults despite the need for such programs.* No other segment of the population has so little formal education.

An entirely new dimension of education is being shaped by some current research on learning theory and child development. It emphasizes the importance of the years of childhood before age 6. However, kindergartens and other programs for young children are not generally available in rural areas. And rural children who have a physical handicap or learning disability or need some other type of specialized help are fortunate if they attend a school where special help is provided.

These program limitations result from the fact that Americans have never accepted the need for compulsory education. They have only been in favor of compulsory school attendance with the compulsion on the child rather than on the school or the teacher. Even our patterns for financial reimbursement are based on attendance rather than on what schools actually do or on the scope and quality of the programs they provide. If a national commitment for compulsory education develops, however, it can serve the varied learning needs of all children only where it is comprehensive. Here is where major program modifications are needed.

Meaningful Learning Experiences

Educational programs in rural areas need to become meaningful in the lives of students. In the language of the day, they need to be made relevant. While I am excited over the few exceptions I know about, rural school programs tend to be textbook-centered and have only indirect relationships to the realities the students know.

School programs everywhere seem to have a preoccupation with cognitive learning and an expectation that students must learn more faster. I believe it is time to abandon that emphasis and turn in the

*See The People Left Behind, report of the President's National Advisory Commission on Rural Poverty. U.S. Government Printing Office, Washington, D.C. (1967).

opposite direction. The knowledge explosion is too rapid for anyone to expect students to keep pace. Instead of requiring students to learn more facts, we should help them develop skills in finding information, testing and analyzing it, and applying it to practical situations.

Rural community life tends to lack variety. And its sameness is reinforced by the general absence of offerings in music, art, drama, literature, or other areas that emphasize values, beauty, and feeling.

Rural communities are struggling to adapt to the circumstances of the space age. Some are making it; some are withering on the vine. But even as they struggle, they operate schools where students sit in modern buildings learning about things that they feel are wholly unrelated to them or their future or to the community in which they live. Some program modification toward relevance seems essential.

Educational Planning

There are not enough people at state or local levels who can give adequate attention to how educational programs are or should be developing. School officials have been so occupied with holding things together that they have had to neglect planning. The lack of planning is more evident in rural areas, where the determination of objectives is too often pushed aside. From some source within each state school system, planning activities that can guide program modifications must be provided.

Aggressive Personnel Policies

High-quality educational programs in rural areas depend on the adoption of personnel policies and recruitment practices sufficient to attract top teaching talent. Clearly, the quality of any program is determined by the competence of the people who staff it, and it is well known that rural schools compete poorly for well-qualified personnel.

It has been general practice for rural communities to announce personnel vacancies, accept applications, and then select the best from among those applying. Few have been able to actively seek teachers, a practice common in the personnel departments of large school systems. As a result, rural school boards for more than three decades have been employing the cast-offs, the misfits, and the provisionally certificated, along with an occasional gem. Unfortunately, when there has been a choice, some rural school boards have been inclined to demonstrate concern for the taxpayers by selecting bargains strictly on the basis of price.

My point here is obvious. Rural schools do not employ many teachers. And because they do not have many, they cannot afford to have poor ones. But poor ones they have. And they will continue to have poor ones until they adopt policies that will attract and retain the most competent people available.

Capitalizing on Existing Strengths

Not everything about the schools in rural areas is poor, weak, or subpar. They have certain inherent strengths. For example, they seldom have overcrowding or large classes. In most rural schools the teachers are well acquainted with their students, know where they live, and know who their relatives are. Because it is important for teachers to know as much as they can about their students, those who work in rural communities have a unique advantage.

Perhaps the greatest potential asset of the schools in rural areas is just the fact that they tend to be relatively small. This gives them a chance to escape some of the bureaucratic red tape that handicaps large school systems and gives them opportunities for flexibility that larger systems cannot enjoy. It gives them a chance to be creative and to experiment with new approaches to learning.

Unfortunately, rural schools have expended much of their energy and resources in trying to emulate urban schools, and their limitations have prevented them from developing high-quality programs in an urban mode. Their strengths too frequently have been ignored. These strengths can be utilized and may well become the key to the quality programs needed.

DISCUSSION

Walter L. Slocum

I agree with most of what Dr. Isenberg has said. On some aspects of the topic my perspectives are perhaps slightly different.

It is true that rural education has been substandard for a long time, but few rural people have been disturbed by this fact. We are concerned now because education is perceived as crucial for one's life chances. The educational system identifies those who are talented and offers them a ladder for upward mobility. For the others, the steps on the ladder become barriers. Many are defeated. The system screens them out, and then chances for upward occupational mobility are minimal (Slocum, 1966, p. 142).

Dr. Isenberg reminded us that efforts to improve our rural schools are usually resisted by rural people. He said that in his opinion the opposition has been more emotional than rational. I am not sure about this. I would suggest that there are probably two principal reasons for opposition to change: (1) the weight of antiintellectual rural traditions, and (2) the cost of new facilities, new programs and higher salaries for teachers. I am inclined to believe that the second is more important than the first at this juncture in our history. I believe that most contemporary rural parents realize that their children will probably have to migrate to urban centers to find employment, and I also believe that most of them realize, at least dimly, that education is important for occupational reasons. Most successful commercial farmers are aware that a good education is necessary for successful farming. I do not believe that all rural parents are well informed about the importance of high-quality education or of scholarly achievement, but I believe that most of them can be persuaded that these matters are important.

Reaction to the impact of educational innovations and higher teachers' salaries on local property taxes is another matter. Such taxes are already high, and if rural residents are not convinced of the importance of better but more expensive education, their reluctance to vote for higher taxes is rational and understandable. For many older voters, education has ceased to be a personal matter; their children are not in school. Lower taxes could easily be of more concern to them than the education of their neighbors' children.

In the past, most rural migrants entered the urban occupational structure at the bottom and rose little. Blau and Duncan (1967) concluded on the basis of data from a 1962 nationwide survey of the occupational mobility of American men that the influx of unskilled rural migrants made it possible for urban men to move into higher occupations. They also concluded that the handicap of rural origin does not persist into the second generation, except for nonwhites. They found education to be crucial for upward mobility.

Because mental requirements are superseding physical requirements in many jobs, it is in the national interest to provide migrants and others with as much education as they can absorb.

I agree with Dr. Isenberg that intermediate districts are useful in providing supplementary services, but I am not as optimistic about the potential of such districts as he appears to be. They have little power or money; their potential is therefore limited.

I also agree with the recommendation of Dr. Schultz for more investment in human capital. I understand this to mean that more money should be invested in rural education. Where will the money come from? It is unlikely that local property owners in depressed

areas would vote for tax increases of the magnitude required. In my view, most of the burden of supporting schools should be moved to the federal government and the state governments. Shifting the burden would remove a basic reason for conservative action at the local level. In fact, it might induce people in many rural communities to support innovative changes, and in the long run (say 25 years), it might change the whole picture.

But we need faster change. A vigorous campaign to inform rural residents of the importance of high-quality education and scholarly achievement seems essential. We should offer additional incentives to teachers. In part, these incentives might be psychological or sociological, but money is crucial. We need far better salaries and improved career lines. The latter are of special importance for talented people who need to know that they are not in dead-end jobs. Perhaps we need something like a state career service for teachers; if most of the money came from state and federal sources, this might be achieved. I am not prepared to suggest that local school boards be abolished. I have a great deal of respect for the judgment of ordinary citizens when they have the necessary information. The potential is indicated by the phenomenal success of school consolidation, which has been achieved through persuasion and consent rather than coercion.

I agree with Dr. Isenberg that there are unmet educational needs among rural adults. The census shows that the educational attainments of rural adults are low. In fact, there are many functional illiterates, especially among migratory farm workers. Many of our Spanish-Americans cannot read or write English. For these people, there is need for English instruction and so-called basic education—reading, writing, arithmetic, and oral communication skills. For those who are displaced by technological progress, occupational retraining is required. Commercial farmers need continuing education. To meet these needs, we have noncredit educational activities sponspored by the Cooperative Extension Service, evening courses in schools, community college courses, and some Manpower Development and Training Act programs. Public school systems have not addressed themselves to the educational needs of adults in rural areas to any appreciable extent. Probably the need for such programs is only dimly seen by most adults.

I also agree with the view implied in Dr. Isenberg's comments about the need for educational planning and for aggressive personnel policies. Where will leadership come from? Experience with the Office of Economic Opportunity demonstrated that few rural communities were able to prepare adequate project proposals. The land-grant universities continued with traditional functions. Consequently,

cities got most of the money even though a large proportion of the poor live in rural areas. In my opinion, leadership for revitalizing rural education will have to come from the federal government. To provide it, a new organization will probably have to be created, because established agencies find it exceedingly difficult to undertake radically new missions. One reason for the difficulty is that an established agency is influenced by the perceived expectations of its clientele. Another is that specialists working in an established agency usually develop what may be called a trained incapacity to accept radically new roles as long as they are in that agency. Furthermore, the top echelon may regard new missions as a threat to support for important activities that give the agency its status.

Several educational innovations appear to have promise. I would like to comment on three.

Recognition of Merit. Teachers in a rural school have the opportunity to become well acquainted with students and with students' relatives. Dr. Isenberg lists this opportunity as one of the strengths of the rural school, implying that the relationship may lead to greater creativity, but I believe that usually it does not. My studies indicate that most rural students do not view teachers and counselors as models or as sources of educational or occupational inspiration (Slocum, 1968). I interpret this to mean that few rural teachers in my state make any special effort to influence the careers of their students. It may be different in other states, but I doubt it. The potential can be seen in an experiment reported by Rosenthal and Jacobson (1968). Teachers were told that randomly selected elementary students were gifted and would spurt ahead of their classmates. They did spurt ahead, advancing especially fast in the first and second grades. The results of the experiment suggest (1) that teachers' expectations affect their treatment of children, and (2) that recognition is especially important in the earliest educational stages.

Individualized Instruction. One of my colleagues at Washington State University, Dr. Arnold Gallegos, has developed a method of individualized instruction called High School for One. It is a method of giving instruction in specialized subjects. Prototype systems in electronics, arc welding, plastic industrial arts, and speech systems were successfully field-tested in a Washington high school. The systems use loop film, slides, audio tapes, circuit boards, an instructional booklet, and a teacher's guide. (See Gallegos, 1967.)

Occupational Guidance through the Curriculum. Since most rural youths will move to urban places, it is obvious that they need guidance in preparing for occupations in which they might be skilled but in which they are inexperienced because the occupations are not found in rural communities. This need is not being met satisfactorily.

Small schools have only a few counselors, and these few do little occupational counseling. The President's Advisory Committee on Rural Poverty stated that "many of the students who graduate from rural high schools are not finding jobs because of an inadequate school program or because they are not directed to the jobs that are available." Furthermore, dropout rates are higher in rural areas than in urban areas, according to a study by Cowhig (1964). The high rates may be due in part to failure of the schools to convince students that schooling is relevant to their occupational chances.

One solution to this problem would be to incorporate guidance-oriented units in the curriculum, starting in the elementary grades. The units would constitute a conceptual map of the world of work. A pilot program of this type was successfully tested in a small Idaho school in 1968. It was combined with ability-testing, visits to work organizations, and counseling. The reactions of teachers, students, and parents were enthusiastic. Such a program would not eliminate the need for counselors; on the contrary, it might increase the demand by increasing students' awareness of their need for guidance from a trained counselor.

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DISCUSSION BY PARTICIPANTS

The discussion brought out the following supplementary points:

1. We could make far more extensive use of radio, television, and other technologies in bringing the rural population in touch with the world of education.

2. Moving to computers, television, or other new technological devices will not in itself bring the necessary quality in education. The cost of some of the modern technology makes its use by rural people in some areas prohibitive.

3. Improvement in education will come about through many small innovations. A large proportion of these will not require additional funds or the reorganization of schools.

4. The best teachers in rural areas tend to migrate to larger centers where there are better facilities and living conditions and higher salaries.

5. To improve the quality of teachers in rural schools, teaching in those schools must be made more attractive.

6. Consolidation in education can usually be defended on the basis of improvement in quality. But there is not sufficient pertinent information to reveal the extent to which rural people can and will shift their identifications and support from the small local school to the larger consolidated one that is frequently located outside of their community area.

7. Local initiative and interest are important in achieving school reorganization, but incentives on the state level contribute much. The requirement of state approval of reorganization plans before proceeding prevents the richer districts from leaving out the poorer districts. It also prevents a district from becoming isolated and having no larger unit with which to consolidate.

8. We do not have a clear definition of quality of education. Until we do, it will be difficult to agree on the program inputs that are required for high-quality performance.

9. Quality of education in all its aspects—facilities, program, and performance—varies greatly in the United States.

10. We have data on dropouts, aspirations, occupational attainment, and educational achievement tests. But we have not systematically gathered data by which we can evaluate the actual consequences of the various kinds of program inputs.

11. In the future, more emphasis will have to be given to adult education. More and more, our problems are solved through programs requiring group decisions, and many people find themselves unprepared to participate in making the decisions.

12. Greater emphasis on adult education would create more concern about the inadequacy of all rural community services. The development of concern is the first step toward improvement.

MAIE NYGREN

Rural Housing in the United States: Essential Steps Required to Upgrade It

Rural housing in the United States ranges from palatial structures to tar-paper shacks. Although more spacious than urban housing, it is considered less than adequate.

Ownership of occupied housing is more general in rural than in urban areas. According to the 1960 census, more than 7 persons in 10 owned the houses in which they lived, compared with about 6 in 10 in urban areas. The census showed that nonfarm housing in rural areas is newer than urban housing and that farm housing is older than urban housing.

The classifications of housing made by the Bureau of the Census tend to denote quality of construction. Housing classified as "sound" presumably is free of defects or has only defects that can be corrected through routine maintenance. "Deteriorating" housing is supposedly in need of more repair than would be effected through routine maintenance, and "dilapidated" is considered a danger to the health, safety, and well-being of occupants.

In 1960, 8.5 million occupied units in the United States were classified as less than sound. More than half of these (4.8 million) were in rural areas. Yet people in rural areas make up only about one third of the U.S. population. We find that 1 farm family in 4 lived in dilapidated or deteriorating housing, compared with 1 urban family in 12. As one would expect, owners had better housing than renters. The number of nonfarm occupants with housing classified as sound was slightly greater than the number of farm occupants with such housing.

Deficiencies in plumbing account for a large proportion of the less-than-sound classifications in rural areas. In 1960, more than

4 million housing units were without piped water inside. About 9 in 10 of these were in rural areas, and more were in nonfarm than in farm dwellings. About 6 million dwellings were without a flush toilet; more than 5.4 million were in rural areas. Flush toilets were lacking in more than one third of the farm dwellings and in about one fourth of the rural nonfarm dwellings.

About 6.9 million housing units lacked a bathtub or shower; about 5.4 million of these were in rural areas.

Quality of housing varied according to region. In general, housing was poorest in the South. The proportion of rural homes rated sound in the East North Central states was greater than the proportion of urban homes rated sound in the East South Central states. Most of the new farm and nonfarm housing units (i.e., those built in the 1950's) were in the Pacific, Mountain, West South Central, and South Atlantic states. In the North Central and Northeastern states, three farm dwellings in four had flush toilets, only about half of the farm dwellings had them.

Only 27.4 percent of the owner-occupied, rural nonfarm housing units were valued at $5,000 or less. Yet 72 percent of the rural nonfarm units occupied by nonwhite owners were valued at that level.

Although 28.1 percent of the owner-occupied rural nonfarm housing units were valued at $12,500 to $35,000, only 4.7 percent of the nonwhite owner-occupied units were valued within that range.

Three fourths of the total number of persons living in owner-occupied farm units lived in units rated sound, but only two fifths of the nonwhite owners lived in units with this rating.

One twentieth of the total number of persons living in owner-occupied farm units lived in dilapidated dwellings, but one fifth of the nonwhite owners lived in such dwellings.

Only 1.2 percent of the owner-occupied farm units had as few as one or two bedrooms, but 5.8 percent of the units occupied by nonwhite owners had that number. At the other end of the scale, 20.2 percent of the owner-occupied farm units had eight or more bedrooms, but only 5.7 percent of the units occupied by nonwhite owners had that number.

Actually, statistics of this nature reveal little about the quality of housing or about the impact that housing has on people. No valid basis has been established for comparing the livability of spacious housing, lacking in modern plumbing and perhaps with a leaky roof, with that of cramped quarters having modern plumbing and a good roof. In evaluating housing, it might be well to bear in mind an observation made by Winslow (1950, page v):

The frustration which results from overcrowding, conflict between desires and needs of various members of the family, fatigue due to the performance of household duties under unfavorable conditions—these are health menaces quite as serious as (if less obvious than) poorly heated rooms or stairs without railings. The sense of inferiority due to living in a sub-standard home is a far more serious menace to the health of our children than all the unsanitary plumbing in the United States.

Hall (1966) warned of the hazards to individuals and society of our failure to recognize the space needs of man. He notes that every organism, including man, needs and identifies a "personal bubble of space." This personal bubble becomes a mobile territoriality that the individual guards from penetration by other organisms, except for a select few individuals and then only for short periods. Man uses this personal bubble of space not only in interrelating with other individuals but also in interrelating to his fixed environment. So sacred is this bubble, Hall maintains, that if it is crushed or dented the individual suffers virtually as much damage as he would if his body were crushed or dented. The long-range consequences of continuous assault on personal bubbles of space, Hall says, are disintegration of family life, functional failure of social customs and rituals that temper aggression, and behavioral sinks potentially more lethal than a hydrogen bomb.

Imagine, then, the assaults on personal space that occurred for an 18-year-old girl (a farm worker) who lived in a shack with 17 other persons—her mother and stepfather, brothers, sisters, and one sister's four children.* The shack consisted of a small porch, two bedrooms, and a combination living room-kitchen. The family lived in the mountains near Santa Cruz, California, where temperatures are moderate. Greater damage to personal space could have occurred in the housing environment of an Eskimo family of 10 living in a shack heated only by a wood-burning stove.†

A number of programs have been established to help families improve their housing conditions.

In the federal government, agencies that sponsor programs aimed, specifically or circuitously, at improving rural housing are the Farmers Home Administration (in the Department of Agriculture), several agencies in the Department of Housing and Urban Development, and the Office of Economic Opportunity.

*"The Girl Farm Worker," San Francisco Examiner and Chronicle, February 23, 1969.

†"Ted K's Group Sees Alaska Poverty Toll," San Francisco Examiner, April 10, 1969.

A farm resident who is unable to obtain sufficient credit elsewhere at reasonable terms can negotiate a loan from the Farmers Home Administration. The loan, together with other debts, must not exceed $60,000 or the normal value of the borrower's farm, whichever is smaller. The borrower has the privilege of making large payments in years of high income and is expected to refinance the unpaid balance when reasonable rates and terms are available from conventional sources.

If a farm owner's need is for minor repairs to his dwelling in order to make it safe or to eliminate health hazards, direct loan assistance is available from the Farmers Home Administration. Interest rates are 4 percent on a maximum of $1,500 for up to 10 years.

A rural nonfarm resident in a community of not more than 5,500 who wishes to repair or build a home or purchase a nonfarm tract has available another loan program sponsored by the Farmers Home Administration. Applicants who do not have sufficient income to meet payments on a loan at the usual rate of interest may qualify for "interest credit." Under the interest credit plan, the government supplements the interest payments of low-income families.

The Federal Housing Administration (in the Department of Housing and Urban Development) sponsors a loan program for persons wishing to purchase a farm home or a rural nonfarm home. The maximum loan is $13,500, and the interest rate is 6-1/2 percent for a maximum of 30 years.

The Federal Housing Administration (FHA) offers more liberal credit to low- or medium-income families who appear able to achieve ownership but are unable to meet generally applicable FHA credit requirements.

Low-income families wishing to purchase a home, and having incomes suggesting repayment potential, can obtain loans at an interest rate as low as 1 percent. Periodic adjustments between 1 percent and 3 percent reflect changes in the home owner's income. Purchases must first be made possible through a nonprofit organization that acquires a volume of housing and rehabilitates it with FHA-insured mortgages and resells to families classified as low-income.

Independent or cooperative ownership by low-income families is possible under still another FHA program. The difference between 20 percent of the family's monthly income and the monthly payment under the mortgage terms (to include interest, taxes, insurance and mortgage insurance premium) is absorbed by FHA. At initial occupancy, income cannot be greater than 135 percent of the maximum income limits that can be established in the area for initial occupancy in public housing. Income eligibility limits are related to size of family.

An FHA mutual self-help program provides grants to public or private nonprofit organizations to pay for part or all of the costs incurred in developing comprehensive programs of technical assistance that will enable individuals or families to carry out mutual self-help efforts. Loans are available for developing land or for purchasing building materials.

Programs designed to generate a supply of rental housing in rural areas are sponsored by the Farmers Home Administration and FHA. A nonprofit or public agency must assume responsibility for constructing or rehabilitating the units. Loans are possible at 3 percent for a maximum of 50 years. FHA can make payments periodically to the lender in order to reduce interest costs to a level of 1 percent.

Rehabilitation loans up to $10,000 at 6-1/2 percent for a term of 20 years are available through FHA to rehabilitate family-owned structures outside of urban renewal areas. For home improvement, FHA-insured loans are possible up to $5,000, with a maximum maturity of 7 years, 32 days.

Housing for domestic farm workers is possible through two programs sponsored by the Farmers Home Administration. A nonprofit corporation formed to benefit farm workers can obtain loans at 5 percent for 33 years. The second possibility is a grant of up to one half the cost of providing the farm labor housing, which does not have to be repaid. The corporation provides the remaining one half.

With such a variety of programs for improving housing in rural areas, one wonders why more progress had not been made. In 1968, farm labor housing units in California accommodated 1,560 families, but 4,040 families had to be turned away.* In the Western Regional Office of the Farmers Home Administration, 1,200 loan applications by California residents awaited processing largely because there were only 19 county offices, each staffed by two people.†

One basic need, of course, is a massive infusion of funds, not just to build houses but also to provide enough employees to bring the programs to fruition.

A commitment for a maximum housing environment for everyone is also needed. Money is of little avail if people do not take advantage of loan programs. The difficulty is exemplified by the rural elderly, who cannot take full advantage of programs offered by the Farmers Home Administration or FHA because they are not considered good risks by conventional lending agencies.

*V. Ralph Gunderson, Chief, Migrant Programs, Western Regional Office of the Office of Economic Opportunity; personal communication.
†Philip C. Hansen, Chief, Real Estate Loans, Western Regional Office of the Farmers Home Administration; personal communication.

Elderly farm owners provide another example. They are of a generation that has been reluctant to use credit for any purpose other than maintaining or improving the farming operation. Many abhor the idea of using credit to make their homes more comfortable. They have lived many years without running water, flush toilets, and central heat, and they reason that they can continue to do so.

If society feels that it is important to increase the comfort and safety of rural housing occupied by elderly owners, it may be more practical to make grants available to them rather than loans.

For many elderly people who continue to live on their farms and prefer to live there, lack of transportation is a more serious concern than inadequate plumbing or an antiquated heating system. A subsidized transportation system for aged farm residents who can no longer drive might be a less costly means of extending the housing supply than building geriatric enclaves.

What about deficient plumbing? What kind of "carrot" should be devised to encourage more owners and landlords to improve it? Studies show that correction of plumbing deficiencies would cost between $2,500 and $2,700 per home.*

But if Hall's theory about personal bubbles of space is valid, deficient plumbing may be a secondary matter. If it is secondary, space deficiencies should be the first to be corrected. For either kind of deficiency, plumbing or space, extending the self-help concept to owners and landlords should increase the effectiveness of improvement programs.

Although the self-help programs administered by the Farmers Home Administration and the FDA have been criticized, they appear to be practical for some low-income families. Critics maintain that these programs tend to exclude families most in need of housing, that they tie familes to locations that may cease to offer suitable employment, that they result in inefficient use of labor, and that the larger community does not benefit if the spirit of cooperation fails to survive (Van der Ryn et al., 1968).

If any one of the possible human gains generally attributed to self-help housing is realized, it would seem that continued investment and expansion of the program are defensible. Gains that usually accrue are increased sense of self-worth, acquisition of "salable" skills, and acquisition of knowledge, skills, and attitudes that contribute to maintenance of property and ownership behaviors.

A campaign to reduce housing inadequacies and inequities and to

*Bruce L. Burnham, Ted L. Jones, and Hughes H. Spurlock, unpublished data. Cited in Status of Rural Housing in the United States, Agricultural Economic Report 144, U.S. Department of Agriculture (1968).

increase the effectiveness of existing programs would undoubtedly be more easily mounted and have a stronger impact if county-wide agencies existed within area-development districts. Lack of such agencies appears to be a major obstacle to the success of public-housing and housing-assistance programs in rural areas. Even at state levels, housing authorities have not been commonly established. A recent study disclosed that of 38 states participating in housing programs, only 7 had a specifically designated housing authority.* In the remaining 31, housing responsibilities were generally assigned to two or more officials, and in most instances the responsibilities were vaguely defined. Without housing authorities at the state level to agitate and inform, local governments, in all probability, will not become action-oriented.

Rent supplements appear to benefit both private industry and low-income families. If a housing supply exists, the supplements permit a prompt response to a family's need. Their most serious limitation is their built-in dependence on the local market. The President's National Advisory Commission on Rural Poverty (1967, p. 93–119) recommended that rent supplements be handled more like grants, so that a family would more closely resemble a free consumer. The Commission recommended a stamp plan for reducing rent gouging and discriminatory treatment. If such a plan were adopted, it would, I believe, have to be accompanied by measures to protect landlords from tenants who unrestrainedly damage the landlord's property. In my opinion, much of the failure of public housing projects and rent supplement programs is due to the mistaken assumption that if you put people in a new environment they automatically will know to use it and care for it. Heavy damage to appliances, floors, and walls negates the objectives of public housing and rent supplements. Before final tenancy arrangements are made for a low-income family, there should be a procedure for ascertaining whether the applicants understand how to use properly all equipment and fixtures in the dwelling and whether they know how to care for floors, walls, and lawns. Where ignorance of these matters is revealed, instruction should be required.

Monetary bonuses as a reward for exceptionally good housekeeping and maintenance practices might do a great deal to reduce tenant-inflicted damage. Families could be invited to participate in a bonus plan. Acceptance would imply willingness to have their dwellings inspected once a month by a team of tenants.

It also seems that a rent supplement program that enables tenants

*Western Regional Office of the Office of Economic Opportunity; unpublished data.

to deal directly with landlords might work better if arbitration boards were created to resolve disagreements between tenants and landlords. Such boards should consist of landlords, low-income tenants, representatives from the agency sponsoring the program, and representatives from the rest of the community.

A real obstacle to implementing loan and grant programs oriented to nonprofit corporations, self-help enterprises, or profit-making concerns is the initial investment required for exploring the resources needed to start a program and for preparing written proposals and requests for funds. To assist groups through these crucial first steps, agencies could be cooperatively established and supported by the Department of Agriculture, the Department of Housing and Urban Development, and the Office of Economic Opportunity. A possible model for such an agency exists in the Rural Development Corporation of Los Angeles. Initially financed by OEO, the corporation is attempting to correlate the development of housing, community facilities, and job opportunities. It has developed a comprehensive plan based on the needs of a specific group and has identified several sources of financing, conducted market analyses, located available land and other community resources, and prepared the multitude of proposals needed to obtain loans and grants. If the money is allocated, 250 single-family detached units, costing $13,000 to $17,000 per unit, will be built.

Efforts to develop new technology for improving the efficiency of housing production, especially in rural areas, should have continued support. Until technology makes lower-cost housing a reality, a decent housing environment for every individual will be an elusive goal. Localities that have a relatively large seasonal agricultural labor force should be encouraged to develop complementary employment opportunities. Some builders have hypothesized that mass production of low-cost housing units or component parts is a feasible complementary function.

We need analyses of the costs and values of good and poor housing. These costs and values should be expressed in both social and economic terms. Without such research, it cannot be proved that good housing for everyone is economically sound.

Despite our good intentions, existing programs probably will continue to bypass people in Appalachia, workers who are still truly migrant, and minority groups. These residents of rural areas present especially difficult dilemmas for housing planners. What must occur, I think, is a coordinated campaign on several fronts: education, job opportunities, health, and enforcement of all aspects of the 1968 Fair Housing law.

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DISCUSSION

Ronald Bird

Dr. Nygren has highlighted the problems involved in improving rural housing. I believe that I can contribute most usefully by trying to supplement some of her ideas.*

When we talk about poor housing in rural areas, we usually fail to emphasize the problem of Negro housing. I would therefore like to discuss the status of Negro housing in rural areas.

In 1960, about one fifth of the substandard housing in rural America was occupied by Negroes. Over 87 percent of their housing was substandard, being classified in the census as either dilapidated or lacking complete plumbing. Since over 95 percent of substandard homes in rural areas lack adequate plumbing, they are a threat to community health.

In an attempt to get more recent data on the status of housing occupied by Negroes in rural America, I reviewed the reports of several housing studies that we have under way in the Ozarks, the Mississippi Delta, and the coastal plain of South Carolina. These studies show that the number of substandard homes occupied by Negroes changed very little from 1960 to 1966. If changes in these areas are typical of what has happened in the rest of the United States, about 84 percent of the homes occupied by Negroes in rural areas were substandard in 1966, compared with 87 percent in 1960. But

*The views expressed here are my own and do not necessarily represent those of the Economic Development Division, Economic Research Service, U.S. Department of Agriculture.

among white families the number of substandard homes decreased by more than one half.

Why did housing conditions not improve as rapidly for the nonwhite population as they did for the white population? There are many reasons. A major one is the tenure arrangement under which many Negroes occupy homes in rural areas. Most of their housing is rented, and most of the renters pay no cash rent. This arrangement applied to over one third of the housing occupied by Negroes in 1960. Our studies indicate that these numbers have decreased slightly. Almost all of the no-rent housing is substandard. It dates back to the sharecropper and tenant farmer economy that existed prior to World War II. Most of the large farms had tenant quarters for their farm laborers, who were mainly Negroes. Although farm labor is no longer needed, because of mechanization, the landowners have not forced their former field hands to vacate. It seems probable, however, that most of these no-rent homes will be demolished once they are vacated. The landlord has little incentive to improve them, and the tenant typically has little money to do so. Furthermore, since he has neither title nor long-term contractual tenure, the tenant is in no position to make major improvements.

Inadequate family income is another reason for so many substandard homes being occupied by Negroes. In 1960, three fourths of the Negro families living in substandard homes in rural areas had incomes of less than $3,000 a year. Our studies indicate that this situation is still acute. In the Mississippi Delta, we found that 87 percent of the Negro families living in substandard homes in 1966 had family incomes of less than $3,000. In South Carolina, the comparable figure was 80 percent.

Migration to better homes and jobs has been suggested as a solution to the housing problem in rural America. During the 1950's this movement did help improve rural housing. But during the 1960's it appears that this migration slowed down. The population in rural areas increased. In the study areas of the Mississippi Delta and South Carolina, the Negro population increased and the white population decreased from 1960 to 1966. The opposite occurred during the 1950's.

Do the occupants of substandard homes have a chance to improve them with their present incomes? On the basis of what has happened in the past, the chance seems slight.

Almost all homes built in the United States in recent years have been built by families with incomes greater than $6,000 a year, and those who made most of the major home improvements had similar incomes.

Furthermore, it is not probable that the occupants of substandard

homes will get better jobs, either in the area or elsewhere, and then improve their homes or buy better ones. In the areas we studied, about three fourths of the families living in poverty were headed by persons who were over 65, or disabled, or female, or functionally illiterate. These characteristics differed only slightly for nonwhite and white occupants of substandard housing.

Therefore, it appears that if the substandard housing occupied by the majority of Negroes in the rural areas is to be improved, some form of government help will be necessary. Since most of the family heads are unable to work, a housing grant or a welfare check may be required. In some instances, both may be necessary; many occupants could not maintain a better home with their current incomes.

I want to cite some of the deficiencies we found in the substandard homes occupied by Negroes in the Mississippi Delta and the coastal plain of South Carolina in 1966. Over 90 percent of the occupants obtained their drinking water from shallow wells or streams. There was no piped-in water. Human waste was disposed of in an outside privy or in a slop jar. Almost 10 percent of these families did not even have an outside privy. Under these conditions, contamination of drinking water is likely.

If steps were taken to correct only these glaring plumbing deficiencies and thus eliminate a major hazard to community health, we estimate it would cost about $2,000 per home to drill a well, install a pump, add a bathroom and fixtures, a hot and cold water system, and a sewage system. The cost of adding these facilities to an old home may be about the same as the cost of installing them in a new one.

It is highly doubtful that much of the no-cash rent housing could be improved without some special program. The landlord might have to be offered a financial inducement to allow the dwelling to be improved. This might take the form of a subsidy payment similar to that used in retiring farm land from production.

DISCUSSION BY PARTICIPANTS

The discussion brought out the following supplementary points.

1. With rapid changes in the distribution of our population, and with houses lasting many years, we frequently find that some areas have a surplus of houses and that others have a serious shortage. The difficulty of moving houses and our inability to predict, years

ahead, the number of houses that will be needed in an area lead to poor geographic allocation. Since houses are frequently built in the wrong places and are difficult to move, we may need more elaborate mobile homes.

2. In the more industrialized parts of the United States, with modern transportation, the location of housing is less important than it is in sparsely settled areas.

3. Some families continue to live in old houses in the country because of the low rent, although for occupational and other reasons they should move. This tendency is declining, however.

4. To meet the rural need, housing costs need to be lowered. This might be accomplished by building smaller units to which buyers could add as their incomes increase. Some newly built rural dwellings should be movable.

5. The sanitation and sewage problem associated with housing in many rural areas could be alleviated by helping people use the information we now have. For example, information could be furnished about the proper depth of a well and about methods of sewage disposal, and people could be helped in applying the information.

6. Overly restrictive and outdated building codes and community standards sometimes are obstacles to building low-income housing. Most developers are serving the middle- and high-income levels.

C. E. BISHOP and FRED A. MANGUM

Employment and Income of Rural People

HISTORICAL SETTING

The basic forces affecting the location of economic activity and population in rural areas have been well documented (Schultz, 1953; Heady, 1944). During the last 30 years the natural resource-based industries have experienced dramatic improvements in technology. Whether these improvements were biological, chemical, mechanical, or organizational, they almost invariably increased the productivity of capital relative to other resources. As a consequence, a premium has been placed upon the employment of capital in the affected industries. This has usually entailed a substitution of capital for labor and a decrease in employment in rural areas where natural resource-based industries predominate.

But the substitution effect is not the only result of changes in technology. New techniques are employed only if they are expected to decrease costs relative to output in the range in which the firm expects to operate. When the costs of increasing production are decreased, incentives are provided to expand the output of the firm. The number of firms also may be affected. The number of firms is largely dependent upon the market demand for the product and the amount of product produced per firm. The demand for farm products, and generally for the products of other natural resource-based industries, grows relatively slowly in response to increases in income. With time, therefore, changes in technology have greatly increased the capacity of the natural resource-based industries to expand their output, but the demand for their products has increased slowly, if at all. As a consequence in order to realize the full benefits from tech-

nological improvements, it has been necessary to decrease the number of firms.

Changes in technology usually involve the creation of new forms of capital. When this happens, old forms are made obsolete and markets are created for the new. The marketing firms created to supply these new capital forms usually serve a larger market than the old firms. Consequently, technological improvement may be accompanied by extensive relocation of economic activities. When this happens, the small towns and villages that depend on obsolete forms of capital and methods of distribution experience an erosion of their economic base.

The technological and organizational changes referred to here have been so extensive that there has been a large-scale reduction in the employment of people in the natural resource-based industries throughout the United States. In most rural areas the employment created in other industries has not been sufficient to employ those released from the natural resource-based industries. The result has been one of the most massive migrations of people in history. Millions have left small farms and villages in search of better employment opportunities.

There is substantial evidence that during this period of large-scale migration the manpower in rural areas constituted a pool from which nonfarm industries drew as needed. That is, the supply of labor from rural areas for employment in nonfarm industries was highly elastic, with migration largely determined by growth in demand for nonfarm products (Bishop, 1961).

The greater number of employment opportunities, relative to the size of the labor force and the higher earnings available in metropolitan centers, created incentives to migrate. Some measure of the pressure to migrate can be obtained by comparing the net change in employment in an area with the normal addition to the working-age group (15 to 64) that would have occurred from changes in age, death, and retirement, assuming no outmigration. During the 1950's, employment in the United States increased by 72 for each 100 persons added to the working-age group. Although many of the remaining 28 were housewives, students, and others not counted in the labor force, unemployment was quite high at the end of the decade.

The states varied greatly in their ability to create employment opportunities for those being released from previous employment and for those entering the labor force age group (Governor's Council, 1968, p. 14). (See Figure 1.) Six states—the Dakotas, Arkansas, Mississippi, Kentucky, and West Virginia—actually experienced a decrease in total employment between 1950 and 1960. The South and the West North Central and Northern Plains states performed poorly.

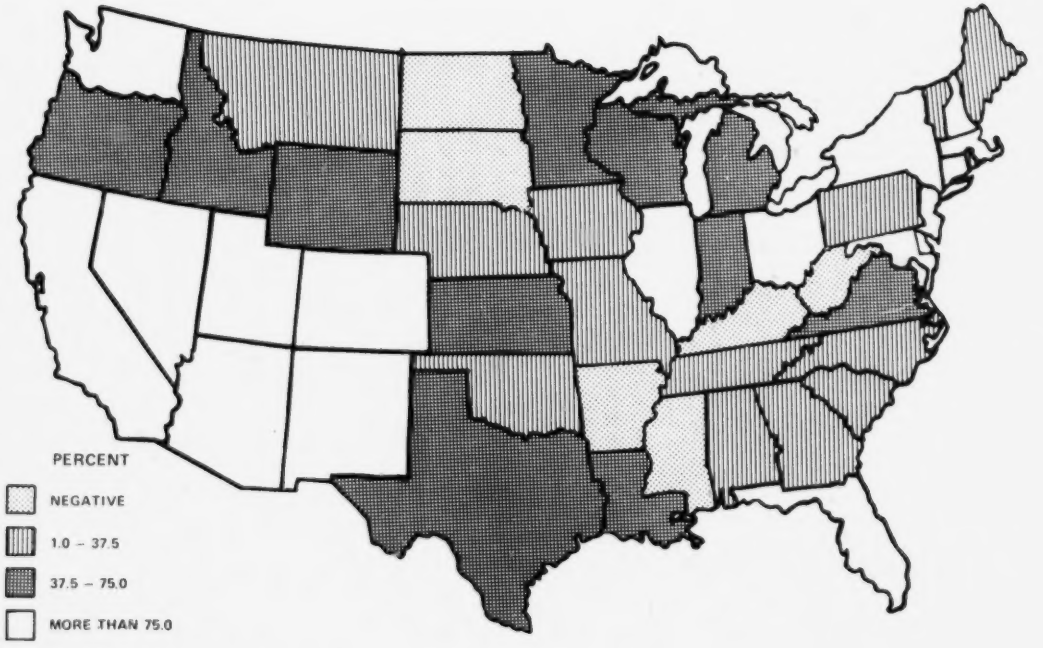

FIGURE 1 Change in civilian employment as percent of change in potential population of working age, 1950–1960. Data from U.S. Bureau of the Census.

In contrast, Nevada, California, and Florida experienced phenomenal increases in employment in relation to natural increases in the labor force. Thus, there was substantial pressure for people to migrate from the slow-growing states to those with better employment opportunities.

Employment growth also varied greatly within states. Edwards and Beale* point out that in 1960

> three-fourths of [the counties in the nation] were slower growing, low-income places. That is, these counties had per capita incomes below the U.S. average and population increases of less than the U.S. average, if not population losses. . . .
>
> On average, these counties lost nearly 1 percent of their population each year from 1950 to 1960. . . . These slower-growing, low-income counties contained nearly half of the United States families with incomes under $3,000 in 1960.

Edwards and Beale emphasize the potential impact of technological change on the location and structure of industrial activity, location of population, and incomes of people. But these are not "once and over" changes. Changes in technology can accelerate the trends or reverse them.

In fact, there is substantial evidence that the changes occurring in the 1960's were very different from those of the previous decade. For example, in 1953, seven states in the north—Massachusetts, New York, Pennsylvania, Ohio, Michigan, New Jersey, and Illinois—accounted for 55 percent of the employment in manufacturing. The trend was toward concentration of employment in the large metropolitan centers. But between 1956 and 1966 the nation added 1,840,000 employees in manufacturing, and the net increase in these seven northern states was only 37,000. In contrast, the increase of employment in manufacturing in the South was 1,026,000; in the West, 465,000; and over the rest of the nation, 312,000 (Council of Economic Advisers, 1968, p. 134).

In the 1960's growth in employment in relation to the potential increase in the labor force from the indigenous population differed strikingly among the states, the differences being greater than they were in the 1950's. Between 1962 and 1966 the United States created employment for 76 of each 100 persons added to the working-age group. Gains in employment were widespread among the states (Figure 2). Progress in the Southeastern states was very pronounced.

*Clark Edwards and Calvin Beale, "Rural Change in the 1960's," talk at the 1969 National Agricultural Outlook Conference. Economic Research Service, U.S. Department of Agriculture, Washington, D.C.

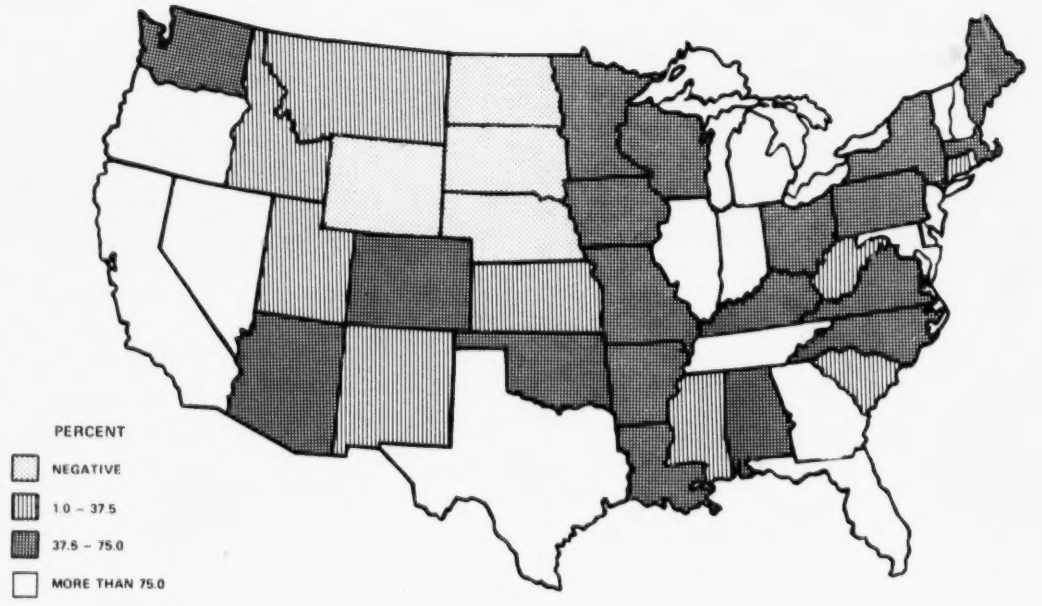

FIGURE 2 Change in civilian employment as percent of change in potential population of working age, 1962–1966. Data from U.S. Bureau of the Census.

Tennessee and Georgia exceeded the national average, and the other states in the region performed at a rate only slightly less than the national average. During this period, absolute decreases in employment occurred in only four states in the northern part of the Great Plains and the Mountain states (Governor's Council, 1968).

Edwards and Beale point out that about half of the rural and semi-rural counties in the nation are creating enough private nonfarm jobs in the current decade (1960's) to offset the declines in the farm labor force. As a result of this improvement in opportunities, the predominantly rural counties have done much better in retaining their populations than they did in the 1950's. In the 1950's, this group of counties had a net outmigration of more than 4.6 million people, but between 1960 and 1966, the annual average outmigration was only about one fifth of this rate.

Many rural counties are experiencing more rapid growth in employment than they have for the past 20 to 30 years, but some are not so fortunate. Migration from the rural areas has been heavily weighted by young adults. Consequently, the residual population in many counties includes a high percentage of persons in the older age groups. Beale* estimates that in 1966 there were 300 counties in the United States in which there was a natural decrease in population resulting from an excess of deaths over births. He further estimates that the number of such counties may rise to 600 by 1970. Thus, even though there has been an improvement, many counties continue to experience economic decline. These counties tend to be rural and isolated.

Improvements have also been evident in the incomes of rural people. In the 1960's there has been a pronounced decrease in the number of poor persons living on farms. The estimate of the number of poor persons living on farms in the United States depends upon the assumption made concerning the poverty income threshold. Using alternative ratios of farm to nonfarm poverty-income thresholds, J. P. Madden estimated the number of poor in 1964 (Table 1). As the income required to attain a given level of living on farms approaches the income required to attain that level of living for nonfarm families, the number of farm poor increases rapidly.

On the assumption that 70 cents will purchase a level of living for farm families equivalent to the level that $1 will purchase for nonfarm families, Putnam† developed estimates of the number of poor

*Calvin Beale, "Natural Decrease in Population: The Current and Prospective Status of an Emergent American Phenomenon" (1969). Report issued by Economic Research Service, U.S. Department of Agriculture, Washington, D.C.

†Israel Putnam, "Dimensions of Poverty in 1964–1965–1966" (1966). Report issued by the Office of Economic Opportunity, Washington, D.C.

TABLE 1 Number of Poor Persons by Poverty Threshold and Residence, United States, 1964

Poverty Thresholds (farm income as percent of nonfarm income)	Number of Persons (millions)			
	Farm	Total Rural	Total Urban	Total U.S.
70	4.4	14.8	19.5	34.3
85	5.5	15.9	19.5	35.4
100	6.4	16.8	19.5	36.3

Source: Information provided by J. P. Madden, Pennsylvania State University. Computations prepared for National Advisory Commission on Rural Poverty.

for 1964, 1965, and 1966, and Madden developed estimates for 1967 (Table 2). Table 2 shows that the number of poor persons living on farms in the United States decreased from about 4.4 million to about 2 million, almost 55 percent, between 1964 and 1967. In the same period, the number of poor in the United States decreased from 34.3 million (Table 1) to 25.9 million, only 25 percent. Clearly, the number of farm families living in poverty is declining much more rapidly than the number of poor nonfarm families.

There are three major sources of decrease in numbers of farm poor. Some of the decrease is the result of a change in residential classification from farm to nonfarm. Although such a change would decrease the number of farm poor, it would not decrease the total number of poor. In contrast, two other sources, increasing the income that farm families receive from nonfarm employment and increasing income from farming, clearly result in a decrease in the total number of poor families.

TABLE 2 Number of Farm Poor and Annual Change, 1964–1967

Year	Number (millions)	Change
1964	4.375[a]	
1965	3.294[a]	–1.08
1966	2.458[a]	–0.84
1967	2.026[b]	–0.43

[a]Source: Israel Putnam. See footnote on page 100.
[b]Source: J. P. Madden, Pennsylvania State University.

MODIFICATION NEEDED IN EXISTING PROGRAMS

Many national, state, and local programs have been designed to affect employment, alter income distribution, and transfer income to the poor. We would like to sketch the general nature of some of the more important programs and emphasize changes that would make them more effective in meeting the demands of the poor.

Farm Commodity Price Support Programs

For many years the federal government has followed policies designed to support the incomes of farm families. The major means chosen have been farm commodity price supports and conservation payments. Most of the programs were regarded as part of the broad effort to help poor people.

Unfortunately, these programs were designed so that the benefits derived from them by farmers were directly related to the amount of land owned and the volume of output. It was obvious that the benefits derived from such programs would eventually be capitalized into land values. See, for example, Hedrick et al. (1968). Furthermore, it meant that low-income farmers with limited assets would derive small benefits from the programs.

The distribution of Agricultural Stabilization and Conservation Services (ASCS) payments by size of payment, shown in Table 3, illustrates the small payment received by most farmers. Many farmers derive no support from these programs. Even the farmers who have allotments, 46 percent of the producers receive only 7 percent of the payments. In contrast, less than 5 percent of the producers (those receiving payments in excess of $5,000) receive almost 37 percent of the total payments.

Bonnen (1968) emphasized that the farm commodity programs are a very inefficient means for improving the income of poor farm families. He concludes that

> it would be necessary to generate about $10 of program benefits for every $1 going to the bottom forty percent of peanut farmers. In rice it would take almost $18 for every $1 going to the bottom forty percent. Even in the case of direct payments in wheat or feed grains it would require $6 or $7 of expenditure for each dollar going to the lowest forty percent of these farmers. . . . It would be necessary to generate from $20 to $100 of benefits for each dollar going to the lowest 20 percent of farmers.

One is forced to conclude that the farm commodity programs are not very efficient in combating low income among farm families.

TABLE 3 Number of Producers by Size of ASCS Payments, Excluding Wool and Sugar Program Payments, 1968[a]

Payment Range	Number of Producers	Percent Distribution	Total Amount of Payments[b]	Percent Distribution
Less than $100	281,413	11.9	13.6	0.4
$100–499	802,584	33.8	221.1	6.9
$500–999	502,395	21.2	361.7	11.4
$1000–4999	677,497	28.7	1,413.3	44.4
$5000–9999	74,250	3.1	502.7	15.8
$10,000–24,999	27,610	1.1	402.7	12.6
$25,000–99,999	5,621	0.2	220.2	6.9
$100,000–499,999	255	*	41.2	1.3
$500,000–999,999	6	*	3.9	0.1
$1,000,000 and over	3	*	7.0	0.2
Total	2,371,634	100.0	3,187.3	100.00

Source: Clifford M. Hardin, statement before the Agricultural Subcommittee of the Senate Appropriations Committee, Washington, D.C., June 4, 1969.
[a]In addition, wool payments totaled $69.4 million, sugar payments $83.4 million, and undistributed funds $122.7 million.
[b]Millions of dollars.
*Less than .05 percent.

Unfortunately, the inefficiency of commodity programs as a means for supporting the incomes of low-income farmers is not widely recognized. Labor is the major, if not the only, resource that these farmers have. The return for this labor in farming is determined primarily by wage levels and alternative opportunities in nonfarm employment.

The farm commodity price support programs can be modified to provide a more equitable distribution of their benefits. A per farm limitation on payments is a step in this direction. But significant and lasting solutions to income and employment problems of the rural poor must come from more efficient programs. Farm commodity price programs cannot be justified on the ground that they aid low-income farm families.

Income-Transfer Programs

The federal government and state and local governments have developed programs to provide assistance to those in need. The paper by Mugge and Eppley (page 42, this volume) dealt with these programs, and we shall not dwell on them.

Changes are also needed that would improve work incentives for recipients of public assistance. For example, if participants in the Aid to Families with Dependent Children program are to be encouraged to seek employment, the penalties for becoming employed must be reduced. Under the current regulations, acceptance of full-time employment forfeits all program benefits and means full assumption of the risks involved in becoming unemployed. In many instances, therefore, employment adds little or nothing to income and increases the risk of loss of income. These are severe penalties. Although penalties cannot be eliminated completely, recipients of public assistance can be encouraged to work by being permitted to earn a specified amount without reduction in benefits. Thereafter, the penalties for working could be decreased by reducing benefits by less than $1 as earnings are increased by $1.*

How such a program might work is illustrated in Figure 3. If a family is paid ow in public assistance, it could be allowed to earn

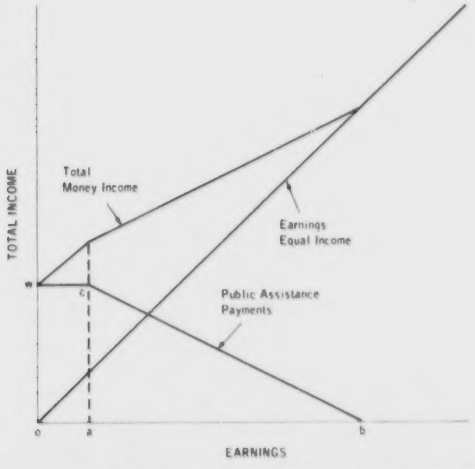

FIGURE 3 A public assistance program to encourage labor force participation. oa = earnings exemption. ob = phase-out earnings level. ow = base public assistance payment. wcb = level of public assistance payment as earnings increase.

*Effective July 1, 1969, all states were required to adopt a work incentive formula that permits mothers receiving Aid to Families with Dependent Children to earn up to $30 a month without having welfare benefits reduced. Although this is an important advance, work incentives are still too small and are limited to one category.

oa annually without a reduction in public assistance benefits. After oa was earned, the benefits received from public assistance could be reduced at a rate of (say) 50 cents per additional dollar earned. The public assistance benefits would automatically cease when the earnings of the family reached ob annually.

Many states refuse to assist families with dependent children when the father is a member of the household. This regulation encourages the dissolution of families in need, and it discourages the formation of families when children are born out of wedlock. These bad effects could be overcome by establishing eligibility criteria on the basis of need, without regard to composition of family.

The American people have been reluctant to provide sufficient cash income transfers to meet the needs of the poor, preferring instead to provide restricted income transfers in the form of specific commodities and services. The major federal income-in-kind programs provided for an outlay of $10.2 billion in 1969 for food, housing, and health services. We believe that programs of this kind should rely on the normal market channels in every practical way, and that, within the general limits of the restrictions of the income transfer, the range of options available to program participants should be as wide as possible. We believe that the commodity distribution programs of the U.S. Department of Agriculture should be abolished and that the food stamp program should be modified and expanded to provide for the minimum food needs of the poor. The food stamp program uses special stamps as a means of paying for food, and it provides a wider range of choices to program participants than does the commodity distribution program, which provides surplus foods for needy families. Producers of surplus commodities prefer the commodity distribution program to the food stamp program, but needy people, food retailers, and producers of commodities not in surplus prefer the food stamp program. Major deficiencies in the food stamp program are the relatively large amounts of cash required to purchase stamps and the fact that little technical assistance can be given to families who need information about purchasing and preparing food.

The food stamp program is financed largely by federal funds but it has been generally controlled by local governments. The food stamp and school lunch programs should be extended on a nationwide basis and administered through the U.S. Department of Health, Education, and Welfare, where they could be divorced from the problem of farm product surpluses. The effectiveness of the food stamp program would be enhanced if close coordination could be established with the Cooperative Extension Service and if technical assistance in purchasing and preparing food could be provided by home economists.

Modification and expansion of present health and housing programs are also needed. Present programs are limited in scope and the benefits are generally concentrated in cities.

Employment Policy

With the passage of the Employment Act of 1946, it became the policy of the United States to create jobs for all who want to work. Since 1960, special efforts have been made to reach this goal.

The poor have a heavy stake in national employment policy. They are among the less skilled and are most likely to be passed over in a slack economy. The poor and unskilled tend to be the last hired and the first fired. Migrants from rural areas to urban centers face similar problems; they are among those who are most likely to be released during a period of economic slack.

Efforts are being made to find a combination of policies that will provide employment opportunities, especially for the disadvantaged, while maintaining reasonable price stability. If full employment is to be maintained, monetary and fiscal policies must not become so restrictive that traditional employment opportunities for the unskilled and semiskilled in the construction, trade, and service sectors are drastically curtailed.

Industries and regions are affected differently by monetary and fiscal policies. The distributional aspects of public policy take on special significance in an economy in which changes in technology are altering sharply the optimal distribution of population and economic activity. As new programs appear, it is important that a coordinated national policy be developed that gives consideration to these differential effects.

The Advisory Commission on Intergovernmental Relations (1968) made strong recommendations for a national policy to deal with urban growth. It recommended that community development programs give attention to changing technology, transportation and communication, personal geographic preferences, emerging market conditions, and social costs. Although the report recognizes that uneven rates of economic progress frequently leave rural America in a disadvantaged position, it does not give due consideration to the interdependence of urban and rural development. A national policy that considers the linkages between urban, suburban, and rural areas is needed. This policy should be keyed to the basic forces that affect the optimal distribution of population and economic activity. The following questions should be asked:

- What organizations of society would yield an efficient production of goods and services?
- How many cities should the nation have? What size should they be? How should they be related?
- How can access to services best be provided?

Until the answers to these questions have been obtained, we shall be unable to determine whether it might be in the interest of society to invest in the migration of people from one area to another or the relocation of industries among areas. In short, without some conception of what consistutes a reasonable national goal, a public policy for investment in regional development programs is without a solid foundation.

Modifications are needed in programs affecting the operation of the labor market. Dr. Isenberg has spoken about the need for more effective programs for developing human resources (page 71, this volume).

In order to take full advantage of educational improvements, more attention must be given to mobility assistance. Programs should focus on counseling, training, and financial assistance to aid workers in moving from areas with deficient employment opportunities to areas with a labor shortage. Special emphasis should be placed on assisting people to move to places with growth potential.

A Caveat on Criteria

If we are to have programs that are efficient in increasing employment and improving incomes, there is a special need to study and refine the criteria of performance used in evaluating programs. Such criteria have a significant impact on both the character of the programs and the distribution of program benefits. Consider the criterion involved in programs oriented toward achieving the largest increases in output from a given level of expenditure. These programs provide work incentives for persons whose marginal productivity is greatest. On the basis of the criterion, it should be expected that program personnel will concentrate on working with those who can translate their efforts into the greatest increase in output. Inherent in this criterion is an incentive for program personnel to work with the best educated and those who have the capital to achieve large increases in production, and the logical conculsion is that those who have the least managerial ability and are the most limited in other resources (in other words, the rural poor) are the last to receive assistance.

Take another example. Some programs are intended to reach certain classes of people. The antipoverty programs have this

characteristic. They provide specified amounts of money for use in improving the condition of the poor. But as soon as the programs were instituted, emphasis was placed on the number of persons who were poor. This being so, it was natural for administrators to assume that "doing the greatest good for the greatest number" was the criterion to be used in appraising the effectiveness of the programs. The result was what we should have expected. The programs were concentrated in areas where there were many people who would benefit from them. That is, they were concentrated in the ghettos of the central cities, despite the fact that there were more poor people in the rural areas of the nation than in the central cities. The concentration of people in the urban centers made it possible to serve far more clients with a given amount of money than could be served in the rural areas.

Programs that reward personnel on the basis of the number of clients in a particular category may encourage them to maintain clients in that category. Perhaps some of our programs would be more effective if rewards were based on the number of people who were assisted in moving from one category to another.

Programs designed specifically to increase employment may be more effective in some areas than in others. Suppose, for example, that the federal government were to subsidize the employment of persons who might not otherwise be employed at prevailing wage rates. If emphasis were placed on serving the largest number of people with a given appropriation (or if the program were initiated only in areas where large numbers of jobs are available), the program would probably be concentrated in the large cities. Unless there were other programs to offset the incentive to migrate, the program would encourage migration to the large cities.

There are three points that we should like to make on the basis of these examples. First, the problems of poverty cannot be solved as long as short-run efficiency criteria, oriented toward production, are used as a basis for organizing and administering government programs. We must evolve new criteria or new programs if the people in need are to receive equitable treatment.

Second, by its purchases and programs government affects importantly the location of employment, the location of population, and the incomes of people. In addition, the many subsidies provided by government are reflected in the location of employment. Yet we have no explicit national policy concerning the optimum location of population and industry in the United States; and in the allocation of government expenditures, little or no consideration is given to their spatial implications.

Third, it is time to reassess our organizations and institutions to

determine their effectiveness in achieving man's goals. Our society is becoming increasingly complex. The individual finds his well-being affected more and more by decisions beyond his control. Consequently, we have turned increasingly to group action through government and voluntary associations. In spite of this, we have not evolved a national program to chart the course of development.

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DISCUSSION

Clark Edwards

The paper by Bishop and Mangum implies that, in general, the remediable defects in rural living are due more to maldistribution of the

economic and cultural products of our society than to a basic inability to make those products available. Other papers have had the same tone.

Many persons are impressed by the expansion of the national economy. Many others, however, including the participants in this conference, worry about the injustices that accompany maldistribution. Twenty percent of the population share among themselves but 5 percent of the products of our market system. Half of the impoverished live in slower-growing, lower-income communities; most of these communities are considered rural. Major segments of our geographic space are depressed areas.

By considering the effects of maldistribution, we see more clearly certain of the trouble spots in rural living. People in rural areas have limited opportunity for getting an education, maintaining health, and advancing economically. These are serious disadvantages. For many families, they more than offset the advantages of rural living.

DISTRIBUTION BETWEEN FARMERS AND NONFARMERS

Bishop and Mangum reminded us that in the 1930's the distinction between farmers' income and nonfarmers' income formed the basis for rural economic development. Agriculture was the major source of income for rural residents, and farmers tended to realize smaller net incomes from a given amount of labor and capital than did nonfarmers. We got the programs, and they worked. They transferred incomes from the nonfarm to the farm sector as planned. However, as Bishop and Mangum point out, 30 years later we continue to run the same programs, despite various unwanted side effects and despite the fact that rural poverty continues to be untouched by the programs.

Two illustrations of the side effects will suffice:

- The distribution of income between farmers marketing commodities covered by the programs and farmers marketing commodities not covered tended to favor the former. For example, if a farmer raised both corn and hogs, and corn was covered, he benefited according to the averages. If he raised corn but not hogs, his benefits were above average. If he raised hogs but not corn, he was not covered by the programs at all, and his income could be adversely affected by higher feed costs.
- The distribution of income between farmers who owned large farms and farmers who owned small ones tended to favor the former. That is, farmers most likely to be living in poverty were least likely

to be helped. We have transferred some income from the nonfarm to the farm sector, as intended, but the programs may have had an adverse effect on some sectors within agriculture.

DISTRIBUTION BETWEEN RURAL AND URBAN RESIDENTS

Bishop and Mangum seem to be more concerned about the distribution of income between rural and urban residents than about the distribution between farmers and nonfarmers. Primarily this is because rural poverty is pervasive and because only one in five rural families is a farm family. Not all of the other four families live in the suburbs; some live in open country and some in small towns. In the thirties it made sense to say that farmers tend to earn less than nonfarmers; today a more pertinent statement is that rural residents tend to earn less than urban ones. In 1968, nonmetropolitan residents of the United States received incomes of about $3,811 per capita, compared with $2,614 for nonmetropolitan residents.

Just as the problem of low incomes among farm people is not to be solved without concern for the nonfarm environment, so the rural development problem is not to be solved without concern for urban economic activity. Bishop and Mangum recognize this but they do not explain exactly what they mean by "rural." Perhaps it is just as well. We know that there is such a thing as rural living and such a thing as city living, and each mode of living has its attractions as well as disadvantages. Without knowing exactly what we mean by "rural-urban balance," we know that rural economic development is needed in this country and that we cannot attain it without paying attention to urban growth.

DISTRIBUTION BETWEEN GEOGRAPHIC REGIONS

Bishop and Mangum seem to have overlooked the distribution of income between geographic regions. (The country might be divided into 10 or 15 regions, each with urban areas, rural areas, farms, and problems of economic growth and equitable distribution of income.) They do suggest that we have failed to develop national goals and that we are therefore unable to make decisions affecting regional distribution of population and income. Instead, we allow economic developments in the regions to be determined by what happens in the open market. As a result, we have Appalachia and the Ozarks, and people are moving out of the Great Plains at an unprecedented rate. As I understand it, Bishop and Mangum are saying: If we want

Appalachia to grow, let us say so, and let us make it grow. If we do not what it to grow, let us say so, and let us assist persons in the region who would be harmed by our decision.

DISTRIBUTION OF PERSONAL INCOME

Distribution of personal income among households and individuals is probably reported more than any other kind of income distribution. About 5 percent of total personal income is divided among the 20 percent of the households in the lower end of the economic scale. This distributional ratio has been little changed so far during the twentieth century despite unplanned impacts of wars and depressions or planned impacts of public programs and policies.

An income transfer program would be a direct attack on maldistribution of personal income. In their discussion of this subject, Bishop and Mangum point out that efficiency would be increased by preferring income supports to commodity supplements and by preferring market channels to bureaucratic channels. This conclusion is logical if we accept the premise on which it is based: that the head of a household rationally follows a well-ordered preference pattern in allocating resources available to him. To the extent that the premise fails to characterize the behavior of families living in poverty, the conclusion is not very useful.

MEASURING DISPARITY OF INCOME

Disparity of income between two groups is often measured by comparing average per capita incomes in the two groups. Changes in the disparity are often traced through changes in the percentage differential or through trends in the dollar gap. These two comparisons sometimes appear to have different implications. When optimists point out that the per capita incomes of a low-income sector are rising more rapidly than those of a base sector, pessimists may be crying that the gap in incomes is widening. And both the optimists and the pessimists may be reporting the statistics accurately. Following is an example of how this could be.

Income per capita in metropolitan counties in 1968 was $3,811. This reflected a rise of 5.8 percent per year since 1959. Nonmetropolitan incomes, although lower, were rising faster: $2,614 in 1968, up an average of 6.3 percent per year. Before taking too much comfort in the faster growth in incomes in nonmetropolitan areas, note what is happening to the gap in income. Metropolitan people realized

$1,197 more per person in 1968 than nonmetropolitan people did. And this gap had widened from $845 in 1959. The growth rate required to keep the gap constant during the period was 8.0 percent. Instead of taking comfort in the realization that the nonmetropolitan growth (6.3 percent) was larger than the metropolitan growth (5.8 percent), we would do better to concern ourselves with the implications of a growth that was far short of the 8.0 percent required to prevent the gap from widening faster.

FUNCTIONAL DISTRIBUTION OF INCOME

Functional distribution of income among its sources—land, labor, capital, and management—is probably the kind of distribution dearest to the heart of the economic analyst. Data on functional distribution are highly useful as means of explaining the causes of maldistribution and as sources of suggestions for ameliorative policies. In these respects, they are probably more valuable than descriptive data on personal income distribution, which has been discussed.

According to the functional distribution theory, the income of a worker depends on the product of the hours he is able to work, the productivity per hour, and the market value of the product he makes. If he is producing things for which there is not much of a market, like roadside souvenirs in a mountain hideaway, his annual income will be limited. And if the hours he is asked to work per year are few, or the quantity of capital or land he has to invest is small, his annual income will be limited. Further complicating the issue may be market imperfections, such as isolation from main lines of communication or subjection to a monopsonist.

Functional distribution theory suggests that if the objective of rural development programs is to create jobs and income from rural people, the objective can be achieved more efficiently by giving preferential treatment to the wages and salaries of rural residents than by giving preferential treatment to investment in plants and equipment in rural areas.

Consider the proposals that have been made to bring industry to rural people through investment incentives and other balance-sheet-oriented programs. These programs are sure to bring plants and equipment to rural areas as a direct benefit. But they depend on indirect, multiplier effects for job creation. In contrast, programs aimed at increasing workers' income and, at the same time, reducing the cost of labor relative to capital would bring about direct gains in employment and income in rural areas.

DISTRIBUTION OF FINAL DEMAND

The distribution of final demand among public and private sources affects other distributions. Regional variations in government demand for privately held land, labor, capital, and intermediate products help explain the distribution of population, location of industry, and rising wage rates and land values in some areas. Government buying power (at federal, state, and local levels) is frequently relied upon in seeking outlets for products and services of depressed areas.

As creators of unique final products (community facilities), governments stimulate demand for schools, hospitals, roads, municipal buildings, utilities, and recreational services. Regional variations in this demand influence the economic advantages that various communities have. Government purchases of community services are mostly from major metropolitan places. These purchases are reliably stable from year to year. Nonmetropolitan areas supply a smaller proportion of the goods and services, but from the point of view of the local economy nonmetropolitan areas are often a major outlet for public goods and services; purchases fluctuate widely from rapid gains to sharp decreases, resulting in unsettling influences on rural economies.

DISTRIBUTION AMONG ECONOMIC SUBSETS

The geographic distribution of income among functional economic subsets of the nation suggests that employment and income programs would be more effective if they recognized the multicounty nature of many economic, social, and political problems. Uniform national policies are not likely to deal successfully with regional variations in symptoms and causes.

National policies having to do with balanced regional growth and rural economic development should create a favorable general environment. But such policies are not sufficient if leaders at the local level do not take responsibility for local problems.

Policies working through families and firms may not be enough, either. An individual can do only so much about a good education for his children if the best schools are in another school district, and only so much about a better job if the expanding demand for workers occurs in another state. He can do only so much about capital accumulation from limited savings if a nationwide inflation keeps pushing up the cost of living.

These problems involve regional questions that need to be dealt

with by those affected, through group action related to roads, schools, zoning, taxes, credit, residential construction, industry location, and community facilities.

Employment and income programs to help correct maldistribution of incomes and assist rural people might best be focused on labor market and trade areas to ensure that jobs are created within commuting distance. The 3,000 counties of the nation might be organized into some 400 multicounty functional economic subsets, each with a need for local programs to provide economic development and improved opportunities for income and employment. Place of work does not need to be in the same county as residence. If the optimal firm location is within commuting distance, the employment problem is solved.

The difficulty in making use of multicounty commuting areas for policy implementation was mentioned by Bishop and Mangum: There is no set of institutions as this geographic level through which to operate programs. As Bishop and Mangum put it in their closing paragraph: ". . . it is time to reassess our organizations and institutions to determine their effectiveness in achieving man's goals."

DISCUSSION BY PARTICIPANTS

The discussion brought out the following supplementary points:

1. In Appalachia, the annual percentage gain in income per capita has been faster than for the nation as a whole. Superficially, this appears to be closing the income gap. On the other hand, the dollar gap in incomes between Appalachians and residents of the rest of the country is widening. This implies that, relatively, Appalachians are getting further and further behind as the economy expands—depressed incomes in Appalachia are not rising fast enough.

2. Some people in the poverty class do move up as they develop skills or locate new employment opportunities, but many seem to be trapped in the poverty class. At present the final outcome of those in the poverty class is highly differentiated. More attention should be given to those who find it most difficult to move up economically.

3. Efforts to subsidize industrial development require more regional planning and action. We should not try to bring industrial growth to every small community, but we may want to locate jobs within driving distance of several small communities. Service industries must be closer to the people than manufacturing industries.

And jobs must be closer to female workers than they are to male workers. We have experienced heavy outmigration from isolated areas with limited nonfarm opportunities to major metropolitan centers. An alternative is to locate jobs within commuting distance of available labor. Location of industries to provide jobs for rural residents can take advantage of economics of urbanization and at the same time offer commuting as an alternative to migration.

4. Planning on a multicounty basis faces two major difficulties. First, the local units have had no experience in working in larger areas and therefore find it difficult to shift their interests and loyalties to a multicounty area. Second, they find it difficult to accept the idea that each community cannot be a center of growth.

5. When it is economically sound to do so, industrial development should be taken to the people, but when the economies of location are unfavorable, the people should move to the jobs. Many times it is difficult to know which situation exists.

6. An important segment of the low income problem in rural America, and of the migration from rural areas, relates to the Southern Blacks. Dealing with this phase of the problem involves more than job creation and economic incentives. There are difficult obstacles related to discrimination, imperfect knowledge, and a number of noneconomic relationships.

7. National goals can be thought of as ends in themselves or as means to further ends. We tend to avoid serious national goal setting and national planning as means to realizing justice, equality of opportunity, protection of minority rights, the democratic process, and due process. Maybe we need more overt planning and more open discussion of national goals with respect to population distribution, rural–urban relationships, and poverty.

R. J. HILDRETH

Comments on Certain Topics Discussed in the Workshop

It is interesting and instructive that a workshop on the quality of rural living should be sponsored by the Agricultural Board, a part of the Division of Biology and Agriculture, National Research Council. In the past the Agricultural Board has devoted little time or energy to problems of rural areas not associated with commercial agriculture. Thus, when the work groups meet to prepare recommendations, they will have a unique opportunity. If they are creative, logical, clever, and lucky, they will develop recommendations that will have a significant impact on the Agricultural Board and on research organizations in the U.S. Department of Agriculture, the land-grant universities, and private industry.

NEED FOR DEFINITIONS

Definition of Rural

Several speakers at the conference have commented on the need for a definition of rural. The Bureau of Census considers rural people to be those who live in the open country or in villages having a population of 2,500 or less. The line between rural and urban has been drawn in this way since the 1910 census. The census definition has served well, but technology and the structure of American society have changed greatly since 1910; it may be time to look at rural differently.

The census definition is a geographic one. It is based on the idea that countryside surrounds a city. Countryside still surrounds a city,

but only geographically. In the past, countryside "surrounded" a city in other senses: It imposed social, political, and economic characteristics on the city. Today the reverse is usually true: Socially, politically, and economically, a city surrounds the countryside.

Bishop (1967) argued that we have become an urban society and that those of us who work in the rural social sciences have not perceived the significance of the growing urbanization of rural America. He pointed out that the application of technologies has urbanized the rural community and made it increasingly specialized and interdependent, as opposed to its earlier self-sufficiency.

This point was illustrated in our discussion of rural medical care. The medical inputs in rural areas are decreasing, but outputs seem to be increasing. The explanation is that rural people are going to urban areas for medical care, and their doing so is an example of the interdependence between rural and urban and of the declining usefulness of the rural-urban dichotomy.

Fox (1968) has reviewed the arguments for dividing the United States into economic areas. He points out that various terms have been used to describe such areas, including urban fields, commuting fields, labor market areas, urban community-of-interest areas, and low-density cities. These terms emphasize the difficulty of defining rural. Rural can be defined geographically, as in the census definition. It can also be defined by referring to certain attributes of social organization (e.g., authoritarianism, independence, and individualism). The difficulty with a definition based on attributes is that it could cause certain large cities to be classed as rural. In my opinion, neither the geographic nor the attributes approach is satisfactory. It might be useful to consider as rural everything that is nonmetropolitan.

Definition of Quality of Rural Living

A definition of quality of rural living is badly needed. If we cannot define what we are trying to improve, how can we know whether a program or policy has improved it?

The definition should name the major components of quality and, if possible, state which ones are essential and which ones are merely desirable. Our efforts to improve quality would be more productive if we could separate one group of components from the other. It might be even possible to arrange the components in rank order.

Schultz (page 64, this volume) suggested that integrating alternative solutions to problems by maximizing or minimizing dollar returns or costs may be more useful than making comparisons. This is an economic approach. If we took it, we would still have the problem of distributing costs and benefits. It would still be necessary to

ask who gets what and who pays for it. Society's answers to these questions determine whether the programs and policies adopted will meet the needs. The chief value of the economic approach, I believe, is that it forces our thinking into an integrated framework. It keeps us from overlooking important items and provides a method for making comparisons.

We heard a discussion of distribution. The distribution problem becomes very complex if we consider the interrelations between the personal-income, geographic, and ethnic aspects. I have no good criteria for determining the optimum distribution of costs and benefits, but this I know: Every program has distributive aspects, and knowing what these are is very important in a society in which many decisions are made by the public through their representatives in government.

INSTITUTIONAL CHANGE

Let me illustrate the relation between institutional change and the quality of rural living. The nutrition, health-care, and housing problems are similar. We deal with them through a market system in which individuals and firms are subject to certain restraints. We distribute income (through the market for labor and capital) to families, who then purchase food and medical and housing services. But the system does not always operate satisfactorily; it is especially unsatisfactory as a means of dealing with the poor. Thus, major improvement in the quality of rural living entails changes in both the system for distributing income and the system for distributing services.

I should explain what I mean by institutions. Society consists of individuals and organizations. Each individual and each organization controls certain activities, within boundaries. Society works through interaction among individuals and organizations. These interactions may be social, political, and economic, and they may involve transfers of benefits, costs, information, privileges, and obligations. Interaction takes place within organizations as well as between them. Both the interaction and the structure of organizations are circumscribed by rules. The rules determine the institutional structure of the society. They are both formal (the law) and informal. When we follow tradition or custom, as we do in business and professional life, we are following informal rules. A system should be so structured that the interactions within it will contribute to fulfillment of the desires and needs of the members of society. If levels of health care, schooling, nutrition, housing, income, and employment oppor-

tunities are inadequate, we should be able to make them adequate by changing the system. How can the system be changed?

Institutional change involves conflict. The institutions and organizations that society has created and implemented provide stability for the members of society. Thus, institutions are very useful, for without some order or stability an individual cannot benefit from the services offered by society.

Society and its social and physical environment change. When they do, institutions and organizations often become outmoded and less useful. What happens? Members of society want progress, which comes through changes. To obtain the desired changes, institutions and organizations have to be changed or, in extreme situations, replaced.

Schultz puts institutional change into a supply-and-demand framework. He holds that an increase in the value of the human agent will lead to a demand for change in institutions. He points out that there are lags in the adjustment of institutions to the increasing value of the human agent and the demand for change. However, I do not feel that pointing out the lags is sufficient. Schultz almost implies acceptance of an inverse Say's law. He seems to imply that the demand for change in institutions will create its own supply. One of the major contributions would be to work hard at increasing institutional change. How can the rules be changed to improve the performance of society? Answers to this question clearly involve defining quality of rural living, discussed earlier.

POVERTY

How does the problem of poverty relate to the quality of rural living? In much of our discussion we seem to be saying that the main problem associated with our subject is poverty. It was suggested that people have poor housing, poor nutrition, and poor health care because they cannot afford to improve these things. They lack income. Otherwise stated, the income distribution system is unsatisfactory. If this is the difficulty, the solution is to transfer income or provide ways for the poor to be more useful to society and thus become eligible to receive higher rewards. Either task is of manageable proportions and could be undertaken immediately.

However, it is my judgment that poverty is simply a part of the total issue of the quality of rural life. I think that we need broad institutional change, not only to improve the distribution of income but also to increase efficiency in providing services to rural people.

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II REPORTS BY WORK GROUPS

NEEDED RESEARCH

In delineating the kinds of research needed to facilitate improvement in the quality of rural living, this work group has been guided by the following assumptions and beliefs:

- The term rural refers to those areas lying outside standard metropolitan areas. (We recognize that any definition of the term is subject to certain qualifications.)
- Statements on the problems of rural living are incomplete if they fail to recognize the interrelations between all aspects of rural life. Investigation of any topical area must include considerations of these interrelations.
- Social systems are undergoing rapid changes, and research concerned with the quality of rural living must be conducted in the midst of these changes. Before research data are collected, the social systems should be defined for research purposes. The definitions would help determine the kinds of data that should be collected and how they should be aggregated and analyzed.
- Future research on the quality of rural living should be concerned not only with conditions of life but also with the means whereby undesirable conditions can be improved. Too often in the past, investigators have collected data without adequately considering how the data could be used for social action.

We believe that research on the rural aspects of health, nutrition, welfare, education, housing, and employment and income should have the purposes stated below.

Health

1. To determine the criteria by which various groups evaluate health services.

2. To develop better criteria for evaluating rural health services.

3. To review the various components of health delivery systems in rural areas (e.g., medical personnel, health facilities, and patterns of organization) and to determine the influence of each component on the health of rural residents.

4. To seek improvement in health and medical-care systems by devising and evaluating models of such systems.

5. To appraise the benefits that technological innovations (e.g., computer networks, helicopters in isolated areas, and television as an aid to diagnosis) might have on the use and quality of health and medical services.

6. To identify the factors that prevent some rural people from effectively using health and medical services.

7. To assess the influence of various methods of health education (e.g., meetings, demonstrations, and dissemination of information through the mass media) on health practices in rural communities.

8. To determine whether appealing to certain commonly held attitudes and beliefs of various social and cultural groups would be a practicable means of inducing those groups to make more extensive use of health and medical services.

9. To determine the extent to which health insurance and other prepayment plans (including medicaid and medicare) enable rural people to obtain the medical care they need.

10. To determine the beneficial and harmful effects of the rural environment on human health.

11. To determine the extent to which family planning is practiced among rural people, and to assess the social and economic consequences of effective family planning.

Nutrition

1. To determine the social and cultural factors that influence the food-buying habits and nutritional status of rural people, and to evaluate social and cultural consequences of malnutrition.

2. To devise and evaluate models of (a) food programs applicable to rural populations, including existing programs, and (b) experimental programs based on technological innovations designed to provide foods that cost less and are more nutritious than those now generally available.

3. To assess the effect of various kinds of nutrition education programs on nutritional status and dietary practices of rural people.

Welfare

1. To determine the welfare goals defined or assumed by policymakers and the factors that may account for major differences in their orientations.
2. To identify the characteristics of rural areas in which there is a great need for welfare funds and the characteristics of those in which there is little or no need.
3. To determine whether welfare agencies in areas where most welfare needs are met (i.e., most of the people eligible for welfare are receiving it) differ significantly in structure and methods from agencies in areas where a high percentage of welfare needs are not met.

Education

1. To identify and learn how to measure the educational experiences that enable students to develop skills that are essential in a changing occupational structure and to effective participation in politics.
2. To learn how to estimate the extent to which different types of rural students might profit from the educational experiences referred to in the preceding item.
3. To assess the effects and determine the cost of new ways of improving the education of students in more isolated areas and of members of minority groups in rural areas.

Housing

1. To determine the criteria that should be applied in judging quality in rural housing.
2. To determine the effect of different structures and arrangements for family living on individual satisfaction, family conflict, and child development.
3. To determine the housing needs of minority groups in rural populations.

Employment and Income

1. To establish means of determining what economic, manpower, and institutional resources a rural area must have in order to provide adequate employment and income opportunities for its residents.

2. To determine the extent to which employment and income opportunities in rural areas are improved as a result of improvements in housing, nutrition, health care, education, and welfare.

3. To assess the impact of religious beliefs and attitudes and different types of church organization on economic motivation, level of economic development, and extent of economic linkages with the larger society.

4. To determine the effects of national economic policies on the distribution (personal, geographic, and racial) of employment and income opportunities in rural areas.

5. To identify and classify manpower potentials in rural areas and to identify areas where training facilities are inadequate.

6. To assess the extent to which the educational aspirations, goals, and attitudes of young people and adults are affected by their perception of the employment opportunities that exist in the total society.

7. To assist in deciding, with respect to any area in which alternatives exist, whether public programs or private programs are preferable as a means of improving employment and income opportunities.

8. To determine the impact that widespread dispersion of industry would have on employment opportunities in rural areas.

9. To learn why government programs for improving employment and income opportunities are more successful in some areas than in others, and to determine what changes would be desirable in the latter areas.

NEEDED CHANGES IN EDUCATION

Rural schools have benefited greatly from the progressive changes made in the United States educational system within the last few decades.

The most dramatic has been the widespread consolidation of schools. Because of consolidation, many rural schools have physical facilities that are superior to those of urban schools.

Similarly, the reduction in the number of school districts from 125,000 to 20,000 has benefited rural students. Now a high school is accessible to almost every rural youngster.

As a result of these and other improvements, the educational level of rural people has risen considerably. But the benefits have not been evenly distributed. Improvements have come slowly or not at all in areas where disadvantaged minority groups make up a high proportion of the population, or where the population is too sparse to support a major industry, or where natural resources are too scarce, or where most of the farms produce low income.

This work group wishes to present its report in two parts. The first consists of statements on changes that are needed in the rural educational system as it exists today. The second, looking into the future, is concerned with several possible approaches to education that were considered worthy of trial to test their feasibility.

Changes in the System

1. A more vigorous effort should be made to acquaint our rural citizens with problems in education.

Since the shaping of educational programs in a community requires leadership by local citizens and support by the public, anything that can be done to increase public awareness of problems and the possible solutions is desirable.

2. There is a need for rural teachers to improve their professional status.

Greater interest in professional development on the part of teachers would make them more receptive to modern approaches to education and to changes in the system. Teachers should be encouraged to complete training programs and participate in other professional activities. By doing so, they could qualify for more rapid advancement.

3. There is a need for further reduction in the number of school districts.

Further reduction would facilitate improvement in services, broaden resource bases, and provide opportunity for more coordinated planning of the total educational services of the community.

4. A coordinated procedure for improving understanding between individual citizens, the school system, and community institutions should be developed.

Many citizens do not understand how the school system functions, how it is organized, or how it relates to other local activities sponspored by the government, such as technical schools, park programs, and VISTA. There is a need to strengthen the relationships within the various segments of the school system and between the school system and the related community institutions.

5. Local educational systems need a major infusion of money from state and federal sources.

Local populations are unable to provide enough revenue to meet the needs of local educational systems. Their burden should be lightened by increasing the state and federal share.

6. Additions to the curricula are needed in many rural schools.

The smaller schools continue to offer only the basic precollege curriculum. They should offer the basic curriculum, but they should also assume responsibility for giving students occupational skills

and guidance (especially as they relate to initial job placement), interpersonal skills, and general knowledge about society. Completion of high school is essential. Dropouts could be prepared for high school equivalency examinations through modern educational technology (e.g., cable television and video tape). Scholarships to help students complete high school should be considered.

7. Education early in childhood should be required for all children in rural areas.

Children from rural homes, especially those in low-income and isolated or semi-isolated areas, are at an extreme disadvantage when cast with children from urban or urbanized rural homes. They lack intellectual stimulation and a favorable social environment in the home during the preschool years. There is a strong probability that such children will be high school dropouts.

New Approaches

1. An educational approach should be tried that permits students to progress at rates determined by their achievement levels rather than at regular intervals (e.g., one grade per year).

Basically, the need is to permit students to move ahead at their own pace. Enough studies are available today to provide the information needed for putting such a program into action.

2. A determined effort should be made to ensure that every student acquires a set of marketable skills before he leaves the educational system.

However, any procedure developed for this purpose should not add to the rigidity of the system or have a depersonalizing effect on students.

3. Alternative models should be developed for a community educational structure in which the total educational mission is coordinated at the "local level."

The educational structure of a community includes several important components in addition to the public school, such as college, private, and public programs ranging from preschool to advanced adult education. At present these include national, state, and locally designed programs that have little coordination. If the components were properly integrated and if coordinating procedures were developed, the result would be a "total learning community." Such a model would require linkages between all the components of the educational system. Persons central to making the model work should have special training that would acquaint them with all the educational programs available and with future manpower needs and trends.

4. Possibilities for providing access to educational facilities to students in thinly settled rural areas should be explored.

The means of overcoming this difficulty cannot be found in the present school system. But exploration might bring several possibilities into view. Three possibilities follow.

Organizational teaching units of acceptable minimum size, within certain prescribed criteria, could be legally established. Such units would establish a proper base for ensuring adequate financing for an optimum range of available learning services. Because of rapid changes in concepts and methodologies, the units should be operationally planned to make continual modification feasible.

In thinly populated areas, it may be best for these school units to be financed and operated entirely by the state.

Television beamed from satellites, cable television, FM radio, and other communication technologies should be developed. They could bring especially needed educational programs to rural homes.

5. An impartial group should study the purposes and methods of the land-grant colleges.

Significant changes are occurring in the system of higher education; for example, boards of regents for higher education are being created, community colleges are being established, and educational programs are being sponsored in new ways. (Among the sponsors are industry, black leaders of communities, and specially organized groups.) The work group believes that a study of the land-grant college system would discover new or modified directions important to the future of rural areas.

NEEDED CHANGES IN GOVERNMENT PROGRAMS AND POLICIES

This work group has been concerned with government programs and policies having to do with people-centered problems in rural areas. In the main, the problems result from the increasing complexity of society (e.g., the distribution of wealth and the availability of public services). The group believes that the following changes should be made in the relevant programs and policies.

1. More program emphasis should be given to rural residents—as people and as consumers.

Programs and policies focusing on commercial agriculture and natural resource development have not eliminated poverty from rural areas. A disporportionately large number of low-income people live in rural areas. But they are not the only ones faced with people-oriented problems. Other rural residents are often disadvantaged

because of inadequate public facilities and services. In the face of strict budgetary priorities, less emphasis should be given to commercial agriculture and to natural resource development.

2. The federal government should establish uniform requirements and benefits for beneficiaries of food and welfare programs.

It is proper that eligibility requirements and benefits should be adjusted to conform with regional differences in cost of living, but they should not vary from state to state as they do at present. Uniformity, except as noted, is necessary in the interest of equitable distribution of benefits.

3. Mandatory evaluations of effectiveness should be made a part of food and other assistance programs.

These evaluations should include comparisons with alternative programs, benefit-cost analysis, and judgments as to the efficiency with which program objectives are met. If the original planning is found to have been inadequate, new priorities should be proposed.

4. There is need for a national policy that would influence the location of industries and assist people in moving to areas where better job opportunities would be available.

The influence on industries should consist in providing favorable social and economic conditions for industrial development in areas where employment opportunities are needed. Assistance in moving should include relocation allowances, retraining programs, and counseling and employment services.

If the location of industries and the migration of people are to continue on a laissez-faire basis, both the receiving and sending areas should receive assistance in adjusting to change. Receiving areas need a transfer of resources to help them provide additional public services. People who remain in the sending areas need assistance in adjusting public services to the needs of the reduced population.

5. Criteria for judging the quality of social services should be established.

Without well-defined criteria, meaningful policy cannot be formulated and innovative programs cannot be properly evaluated. The criteria should include efficiency (or benefit-cost ratios) and indexes of quality.

6. The federal government, in cooperation with the states, should encourage the creation of coordinative human service agencies at the local level.

These agencies would serve as points at which knowledge, resources, and organizational skills for providing human services could be accumulated and used, and as points where local initiative would be expressed. The agencies should be established where they are

needed and not necessarily where other government agencies are located, as in county seats.

7. A comprehensive technical assistance program for rural communities should be developed.

Many smaller centers, particularly those with fewer than 25,000 people, lack personnel qualified to search out and reconcile county, state, and federal programs that could assist in upgrading human services. Thus, there is a need for the federal government to develop a program in which county, state, and federal agencies would cooperate in providing technical and organizational assistance to such communities.

8. Programs should seek greater involvement of local people in achieving national goals.

To ensure the effectiveness of state and national programs, it is necessary to retain sufficient flexibility to adapt these programs to local needs. Representatives of local, state, and national agencies need to interact in identifying goals, establishing priorities, planning courses of action, and evaluating results.

III COMMENTARY AND RECOMMENDATIONS

NOTE: This section was prepared by the following committee, appointed by the Agricultural Board: M. E. John, Professor of Rural Sociology, Pennsylvania State University, University Park; C. E. Bishop, Chancellor of the University of Maryland, College Park; and Paul R. Eberts, Associate Professor of Rural Sociology, Cornell University, Ithaca, New York. The purpose of the section is stated in the Preface.

EDUCATIONAL OPPORTUNITIES FOR THE YOUNG

In most parts of the United States, the educational opportunities open to young people in rural areas are inferior to those open to young people in urban and suburban areas. This lack of equality is due chiefly to the fact that rural areas differ from the others in economic resources and in attitudes toward education.

There has long been a widespread view that rural education should differ from urban education in program content. But there is no justification for allowing differences in educational quality to exist on a rural-urban basis. The notion that urban life is complex and rural life is simple must be abandoned; complexity is everywhere.

A study should be made of the problem of developing and financing educational delivery systems that would ensure equality of educational opportunities, regardless of the geographic location of the schools, and specific recommendations should be made.

ADULT EDUCATION

Education for adults is as important as education for the young. In the United States, the public is constantly being asked to consider, and perhaps vote on, complicated issues. This process is meaningful to the extent that the public understands the issues.

A coordinated, comprehensive effort to provide an adequate adult education program has never been made in the United States. Many

piecemeal programs have been undertaken, but they are uncoordinated and inadequate, and many rural people are not aware of them.

The U.S. Department of Health, Education, and Welfare should appoint a committee to plan the development of adult education programs adequate for today's needs and to consider how much such programs could most effectively be made available.

WELFARE

When social welfare is considered, these outstanding facts are found:

Welfare recipients in rural areas receive less than those in urban areas, both in predominantly rural sections of the nation and in predominantly urban sections. In addition, proportionately few people in rural areas who are eligible for welfare are actually receiving welfare, compared with urban people. These differences persist, not because of inability to raise the living standards of persons on welfare, but because of other considerations.

There are several reasons why many rural people eligible for welfare are not on welfare rolls:

It is often assumed that rural people can live more cheaply than urban people. But the assumption may prove false if cost of transportation is included in rural people's cost of living.

Rural people are strong individualists, believing that people "should stand on their own feet" and that a stigma in attached to receiving welfare. Hence, many abstain from applying for welfare, even though they may be in dire need.

In rural areas, where some people live in isolation or in hard-to-reach places, it is difficult for welfare agencies to get information about all those who are in need.

Because of the assumptions and attitudes associated with welfare in rural areas, persons in these areas who receive welfare, and those who are eligible for it but do not receive it, become isolated from community life and, in consequence, suffer demoralization. If there are a considerable number of such persons in a community, the entire community is demoralized to some extent.

All citizens of the United States, regardless of locality, should have, as a right of citizenship, an adequate level of living, and appropriate national and local institutions should be established to guarantee implementation of this right.

HOUSING

In 1968, 67 percent of the substandard housing in the United States was in nonmetropolitan areas. Deficiencies in rural housing are of long standing.

Government agencies concerned with housing should establish an interagency committee to make a thorough study of the forces that prevent more rapid improvement in rural housing, and new policies and programs should be formulated in the light of the committee's findings.

In the study, consideration should be given to the effects of building codes, labor union practices, lending policies, builders' attitudes toward using newly developed materials, and the supply and quality of workers' skills in the various building trades.

The committee should also try to determine why rural people are often lax about keeping their homes in good condition, and whether alternative patterns of housing for rural areas would be more appropriate. When rural people move to an urban or suburban community, to take advantage of employment opportunities or for some other reason, what effect does the new environment have on their attitude toward maintaining a rural residence that they may own?

SOCIAL MONITORING

Policy decisions on matters concerned with the quality of rural living should have firm empirical support. Current data should be continuously available. Because of the speed with which changes take place, it is impracticable to collect and analyze data in preparation for each major decision; by the time a survey has been conducted and a report written, the scene has changed.

It is recommended that a permanent national data-retrieval system be established to monitor as closely as possible a wide range of data bearing on the quality of rural living and the ability of communities to participate in making group decisions.

Counties or communities, not individuals, should be the basic units of observation and analysis. In addition to protecting privacy, the use of areas as basic units has the following advantages:

State, national, and private agencies are already collecting various kinds of data on a county or community basis and would gladly contribute them for national use. These data could be placed in central files for computer storage, retrieval, and analysis.

The use of area units for analysis paves the way for applying operations-research, or systems-analysis, techniques to the analysis of social data. With these techniques, investigators could quickly discover patterns of relations between social variables.

The system would provide, whenever they were needed, base-line data for analyzing social trends, making it possible to predict the long-range effects of the trends.

The data center could develop ways to evaluate the effectiveness of government programs and policies on observation units included in its analytic system. Such evaluation procedures at present are less systematic.

For government agencies, the analyses of data would be a valuable research tool. For community leaders, they would be an aid in assessing the effects of changes and in making related decisions. For universities and other institutions, they would be an aid in making decisions on development and expansion.

The data system should include indicators of changes in social organization and in quality of living. The indicators of change in social organization should emphasize, but should not be limited to, the forms of economic, political, and educational institutions. The indicators of changes in quality of living should produce information on the incidence of crime and other deviant behavior, on mortality rates, and on health, nutrition, welfare, and housing standards.

How the system could aid in alleviating a specific problem can be illustrated by considering it in relation to crime. It has been asserted that when industry moves into rural areas, criminal activity and other deviant behavior increase. A data center could weigh the validity of this assertion; and if the assertion were verified, an analysis of the data could contribute to formulating policies for combating the problem.

THE TEAM APPROACH TO RESEARCH

In the traditional approach to research, scientists work as individuals, making independent studies of problems in which they are interested and for which they have the necessary resources and equipment. Many scientific triumphs have been won in this way, but some problems require a different approach.

Many of today's social problems require simultaneous attention from research scientists representing several specialized fields. Working as a team, the scientists can integrate their findings into experimental models of the social system in question. If the models

are found to be valid, they can become the basis of proposals for solving the problems. But for problems to be solved, the people being studied must implement the findings, and they probably will not implement them if they do not understand them. Therefore, in developing delivery systems, it will be necessary to involve the people being studied.

The organizational structure of universities discourages the team approach to research. Departments are loyal to the disciplines around which they are organized and are seldom inclined to participate in interdisciplinary efforts to solve problems. Centers and institutes have been established on many campuses to foster interdisciplinary and university-community research, but these organizations tend to become institutionalized, acquiring attitudes similar to those of the university departments. Too often, they become interdisciplinary groups conducting research that has little of the team approach.

Colleges and universities should consider the desirability of introducing innovative methods of organization in order to create the flexibility required in interdisciplinary research and thereby reduce the restraints on tackling certain serious problems faced by rural society.

DISTRIBUTION OF ECONOMIC ACTIVITY AND POPULATION GROWTH

Some of our most serious social problems are the result of, or are influenced by, the geographic distribution of increases in economic activity and population.

Few of the areas that depend on natural-resource-based industries (farming, mining, forestry, and fishing) have been able to provide satisfactory employment for persons entering the labor force. For several decades, improved technology has reduced the number of firms engaged in this kind of production, and the marketing system has undergone extensive changes. The changes have greatly reduced employment opportunities and have led to heavy migration from many rural areas.

Virtually all of the population growth in the United States since about 1920 has been in the metropolitan centers. Much of the metropolitan growth was the result of migration from nonmetropolitan areas. In most of our history, metropolitan centers have grown as a result of this kind of migration. In recent years, however, the centers have had an increase in the proportion of young people in their populations and no longer depend on migration for population growth. Urban blight and pollution are severe problems. The question is: How

large should our metropolitan centers become? Demographers project population increases of 80 to 100 million in the United States in the next 30 years.

More attention must be given to determining the kind of society that is developing in the United States. To this end, we need to know how the quality of living is affected by geographic distribution of economic activity and population, and research is needed to supply the information.

It is recommended that the National Science Foundation provide funds for establishing four regional research institutes and a national research institute to study the geographic distribution of economic activity and population.

It is recommended that the National Goals Research Staff give high priority to establishing goals concerning the geographic distribution of economic activity and population.

It is recommended that a national commission of civic leaders be established to monitor the geographic distribution of growth in economic activity and population, to appraise the effect of the growth on the quality of living, and to bring trends and problems to the attention of the public.

Appendix A

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Appendix B

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